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Distributional and synonymic catalogue of the Geometridae fauna of Van Lake Basin in East Turkey (Lepidoptera)

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Abstract: Distributional and synonymic catalogue of the Geometridae fauna of Van Lake Basin in East Turkey (Lepidoptera). *Priamus* 16 (3): 65-117, 6 figs., 42 maps

In this paper, 207 species of the family Geometridae in Van Lake Basin (East Turkey) are listed. Original references, synonymous names and distributional information as codes are added. Totally 42 maps, based upon geographical codes, are given. The submitted list is a preliminary work to the planned faunistic, taxonomic and molecular studies in near future.

Keywords: Geometridae, Lepidoptera, catalogue, distribution, synonymy, criticism, DNA barcode program, taxonomy, fauna, Turkey, Van Lake Basin, Van, Bitlis.

The aim of this publication is to create a basic list for the further Geometridae studies of Van Lake Basin in East Turkey, concerning the determination of the fauna, solving taxonomical problems based upon the morphology and molecular phylogeny. The planned field studies will be carried out between the years 2018 and 2020. Among the Geometridae subfamilies, *Ennominae* species are in the first place in this study program. Attempts to obtain DNA barcode sequences of the species recorded will be conducted. The *Ennominae* study will soon be submitted as a separate project.

The studying area is composed of two provinces, Bitlis and Van in East Turkey. Total number of the Geometridae species in the studying area is currently 207 (Table 1). Concerning the Geometridae fauna of Bitlis, there is a need to search more intensively. A similar research program has also been published recently by the authors (Kemal & Koçak, 2018d).

Table 1- Provinces of Van Lake Basin with the geometrid species hitherto recorded.

Name of Province	Province code	number of the Geometridae species hitherto recorded
Bitlis	13	88
Van	65	185
Total number of the geometrid species of Van Lake Basin: 207		

The authors published so many faunal papers on the Geometridae of Turkey up to the present time. Only important reports on the *Ennominae* of Turkey and other Geometridae of this country, published after 2012, are selected and mentioned below: Beshkov (2015), Erlacher & Erlacher (2017), Hausmann & Viidalepp (2012), Kemal & Koçak (2013, 2014, 2015a-d, 2016a-d, 2017a-e, 2018a-c), Kemal & Seven (2013), Kemal, Koçak & Uçak (2017, 2018), Kemal & Uçak

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(2018), Kemal, Kızıldağ & Koçak (2018a-c), Kemal et al. (2018), Koçak & Kemal (2012, 2015, 2017), Laszlo et al. (2018), Mironov (2013), Özdemir (2016), Rajaei & Stüning (2012), Rajaei, Stüning & Trusch (2012), Rajaei & Feizpour (2016), Rajaei Stadie & Hausmann (2017), Seven (2016a-b, 2017a-b, 2018), Skou & Sihvonen (2015), Skou, Mironov & Rietz (2017), Stadie, Hausmann & Rajaei (2014), Stadie & Fiebig (2014).

See also **Appendix** (pages 94-95) for a common response to an unfair criticism received about our latest publication on the *Gnophini* (Kemal, Kızıldağ & Koçak, 2018c).

List of the Geometridae of Van Lake Basin

Totally 207 species, belonging to five subfamilies, *Ennominae*, *Orthostixinae*, *Geometrinae*, *Sterrhinae*, and *Larentiinae*, are given below in alphabetical order. To each species, original references, synonymous names in chronological order, and distributional information as codes are mentioned (Koçak & Kemal, 2017). Totally 42 maps are prepared based upon the range codes. Six photographs taken from nature are also added.

The symbol # denotes nomenclaturally unavailable names.

1. *Abraxas (Calospilos) pantaria* (Linnaeus, 1767) (Map 1)
Original Reference: *Phalaena pantaria* Linnaeus, 1767, Syst. Nat. (Edn 12) 1 (2): 863.
 Synonym(s): *pantaria* Linnaeus, 1767
Range (as codes): MA Tgr PT ES FR Co Sa Si IT TR Cc AM 13 30 13C 13Cf 3oD 3oDü

2. *Aleucis orientalis* (Staudinger, 1892) (Map 2)
Original Reference: *Hybernia (Anhibernia) orientalis* Staudinger, 1892, Dt. ent. Z., Iris 5: 170-171.
 Syntypes 2♂: [Türkei]: Amasia; [Israel]: Jerusalem.
 Synonym(s): *orientalis* Staudinger, 1892 Range (as codes): YU MK AL GR Sms UA IL Pa Js JO TR Cc AZ 01 05 07 17 21 31 35 46 47 56 59 65 71 01H 05A 17H 21N 21Nh 31M 56F 65A 65An 65F 65Fa

3. *Alsophila hirsutaria* (Fabricius, 1781) (Map 3)
Original Reference: *Phalaena hirsutaria* Fabricius, 1781, Spec. Ins. 2: 508. Type(s): Europa [emend. *hirtaria* Fabricius, 1776].
 Synonym(s): #aescularia [Denis & Schiffermüller], 1775; *hirtaria* Fabricius, [1776] nec Linn., 1761; *hirsutaria* Fabricius, 1781; *murinaria* Borkhausen, 1794.
Range (as codes): PT ES FR Sa Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU BG Cc GG Tbl Bjo AM TR DK NO SE EE LV LT RU MD UA BY TM Kp 06 65 65D 65Dlc 65L 65Le

4. *Amorphogynia necessaria* (Zeller, 1849)
Original Reference: *Boarmia necessaria* Zeller, 1849, Stettin ent. Ztg. 10(7): 206 (nom. nov. pro *B. hirtaria* var. *Zeller*, 1847, Isis:18). Type ♂: [Türkei]: Ephesus.
 Synonym(s): *necessaria* Zeller, 1849; *inversarius* Rebel, 1903; *grupchei* Carnelutti, 1986
Range (as codes): BG Slv MK GR TR Cc GG Tbl Bjo Bku Kir AZ 05 06 09 34 42 45 65 71 76 05A 42B 76A 76Aa 76B 76Bb

5. *Aplasta ononaria* (Fuessly, 1783) (Map 4)
Original Reference: *Phalaena ononaria* Fuessly, 1783, Arch. Insekten gesch. 3: 1-2, pl. 17 6 figs. 1-5.
 Syntypes: Schweiz.
 Synonym(s): *ononaria* Fuessly, 1783; *rubellata* De Villers, 1789; *rubicapraria* Hübner, 1793; *sudataria* Hübner, [1817]; *faecataria* Hübner, [1819]; *ononata* Bellier, 1861
Range (as codes): PT ES Mu FR Co Si IT GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR CY IQ LB Bsa JO SY RU MD UA BY IL Pa He IR AM Cc 01 05 06 09 12 13 14 16 17 21 23 30 31 33 39 40 41 42 44 46 48 56 59 65 71 80 01H 01J 05A 12A 12Ab 12Ai 13G 13Gd 13F 13F38 16A 21N 21Nb 30D 30Df 33A 33Ak 33R 42B 44A 44Ab 56F 65A 65Ai 65Au 65D 65Dp 65F 65Fç 65Fo 65Fç 65Fz 65Fg 65Kç 65N 65Nd 65L 65Lb 65Le 65N 65Np6 65Np7 65Nr2 65Nr3 65Nm 80B 80Bc

6. *Aplocera annexata* (Freyer, [1830])
Original Reference: *Larentia annexata* Freyer, [1830], Beitr. Gesch. eur. Schmett. 3: 122, Tab. 132
 Syntypes: [Ukraine]: Odessa.
 Synonym(s): *annexata* Freyer, [1830]; *boisduvaliata* Duponchel, 1831

Range (as codes): GR UA TR Cc Arr GG Smt Akh AM IR 05 06 13 14 16 18 24 25 33 36 38 42 44 46 51 58 60 61 65 69 76 80 05A 13G 13Gü 13Gs 13Gw 16A 18F 25A 38K 42B 44L 46Fb 58N 65D 65Df 65Dg 65Dga 65F 65Fb 65Fp 65Fz 65K 65Kb 65Z 65Kz 65Kg 65N 65Np2 65Nr4 65Nm 80B 80Bc

7. *Aplocera columbata* (Metzner, 1845)

(Map 5)

Original Reference: Geom[etra] columbata Metzner, 1845, Stettin ent. Ztg. 6(6): 188-189. Type(s): [Türkei]: Turcia europaea.

Synonym(s): columbata Metzner, 1845; nomadaria Herrich-Schäffer, 1848

Range (as codes): BG GR TR RU Cc GG Bjo Bku Smt Mng AZ AM Dar Da Kus 05 06 13 14 16 24 25 42 58 65 76 05A 13A 13Ax 13Ac 13Ac2 13G 13Gw 16A 58G 58Gg 65A 65Ac 65Ac3 76C

8. *Aplocera numidaria* (Herrich-Schäffer, [1852])

Original Reference: Larentia numidaria Herrich-Schäffer, [1852], Syst. Bearb. Schmett. Eur. 6 (55): 80; ibid. 1851, 3: pl.84 fig.514 [uninominal]. Syntypes: Türkei: Amasia.

Synonym(s): numidaria Herrich-Schäffer, [1852]

Range (as codes): TR Cc AM GG 05 08 25 42 60 65 76 05A 42B 65A 65Ab 65Aba 65F 65Fw 65Fz 76C

9. *Aplocera obsitaria* (Lederer, 1853)

Original Reference: Anaitis obsitaria Lederer, 1853, Verh. zool.- bot. Ver. Wien 3: 264-265. Syntypes 2♀: [Türkei]: Diarbekir.

Synonym(s): obsitaria Lederer, 1853; pseudopallidata Bytinski-Salz & Brandt, 1937

Range (as codes): TR Cc IQ IR Fa Shr Sse Th Elb Bsa 04 05 21 25 30 42 44 46 47 58 62 65 76 05A 30D 30Df 42B 44E 44Eh 44Ei 46C 46G 46Gi 47D 58N 65A 65Ac 65Ac3 65Am 65Am4 65D 65Dd 65Dda 65F 65Fm 65Fp 65G 65Gf 65Gt 65Gy 65H 65N 65Np1 65Np2 65Nm

10. *Aplocera opificata* (Lederer, 1870)

(Map 6)

Original Reference: Anaitis opificata Lederer, 1870, Annls Soc. ent. Belg. 13: 40, 49, pl.2 fig.3. Syntypes: [Azerbaijan]: Elisabethpol [=Kirovabad].

Synonym(s): opificata Lederer, 1870; kawrigini Christoph, 1885

Range (as codes): TR Cc AZ Kir 13 24 25 44 47 65 76 13A 13Ac 13Ac2 13Ax 44E 44Eb 44Eh 47D 76C

11. *Aplocera plagiata* (Linnaeus, 1758)

Original Reference: Phalaena plagiata Linnaeus, 1758, Syst. Nat. (Edn.10)1: 526. Type(s): Europa.

Synonym(s): plagiata Linnaeus, 1758; duplicata Fabricius, 1775; terlineata Goeze, 1781; triplicata Geoffroy, 1785; plagiaria Boisduval, 1840; scotica Richardson, 1952

Range (as codes): DZ Lbs PT ES FR Co Sa Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR Cr TR Cc GG AZ AM Nv IQ Rzw IR Ab Oru Fa Sse Com Kz Glz Kh CY DK NO SE FI EE LV LT RU Krl MD UA BY CN Ui Ju Kön IL Pa Js He LB Bsa 01 05 06 13 14 16 17 18 22 23 24 29 30 31 33 34 35 38 39 42 44 45 46 56 58 60 61 62 65 71 75 80 81 01H 05A 05G 06R 06Rb 13A 13Ab 13Ax 13G 13Gü 13Gs 16A 18F 30D 30Df 31D 31F 42B 44E 44Eh 46G 46Gi 56F 58N 60H 60Hb 61K 65A 65Aa 65Am 65Am1 65Am4 65An 65Ai 65As 65D 65Df 65F 65Fg 65Fp 65Fz 65K 65Kb 65Kl 65L 65Le 65N 65Nc 65Nc4 65Np 65Np1 65Nr4 65Nm 75F 75Fb 80B 80Bc

12. *Apochima flabellaria* (Heeger, 1838)

(Map 7)

Original Reference: Amphidasis flabellaria Heeger, 1838, Beiträge zur Schmett.: 6-7, pl.1 figs. 6-11. Syntypes: [Italia]: Sicilia: Palermo.

Synonym(s): flabellaria Heeger, 1838; marmoraria Buresch, 1915

Range (as codes): AET ES An Sa Si IT MT MK BG GR Rd Cr TR Cc GG Tbl LB RU IQ Bgd Mj CY IL Pa Js Jf JO UA IR TM Kp UZ TJ KG 01 07 10 17 21 26 31 34 44 45 46 47 48 56 65 72 01J 01H 10K 17H 21N 21Nh 26K 31A 31Ab 31M 34C 34Ça 34P 47D 48H 48L 56A 56Ac 56F 56Ft 65N 65Nc 65Nc4 72F 72Fa

13. *Ascotis selenaria* ([Denis & Schiffermüller], 1775)

Original Reference: Geometra selenaria [Denis & Schiffermüller], 1775, Ankündung syst. Werkes Schmett. Wienergegend: 101. Type(s): [Austria]: Vienna district.

Synonym(s): #selenaria [Denis & Schiffermüller], 1775; dianaria Hübner, [1817]; #seleneris Okyar & Aytaç, 1999

Range (as codes): ES FR Co Sa Si IT MT LU DE CH AT PL CZ SK HU RO SS YU AL BG GR Cr TR Cc AZ RU MD UA BY IL Pa Mer CY PK Swa Sgl Klm SdS 01 05 10 14 16 17 21 22 31 33 34 45 46 52 56 57 61 65 81 01D 01J 01H 05A 16A 17H 21N 21Nb 31A 31Ab 31F 31K 31Ka 31Ka3 31M 33R 46G 46Gf 52C 52G 52Gb 56F 61K 61Ka 65A 65Ai

14. *Aspitates quadripunctata* (Goeze, 1781)

(Map 8)

Original Reference: Phalaena quadripunctata Goeze, 1781, Ent. Beytr. 3 (3): 388, nr.94.

Synonym(s): #gilvaria [Denis & Schiffermüller], 1775; quadripunctata Goeze, 1781; fenica Fuchs, 1899

Range (as codes): DZ Clo PT ES FR IT MT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG TR Arr FI EE LV LT RU MD UA BY Cc GG Mng Smt CN Ui Au Chk Ts Kno Sz MN KG Ssn 04 06 13 14 17 42 58 76 04C 13A 13Ac 13Ac3 13Ax 17H 42B 42Bb 58G 58Gg 58Gj 76C

15. *Bellachima diaphanaria* (Püngeler, 1904) (Map 9)
Original Reference: Zamacra diaphanaria Püngeler, 1904, Dt. ent. Z., Iris 16: 295, pl.6 fig.14. Type ♀: [Turkmenistan]: "Aschabad".
 Synonym(s): diaphanaria Püngeler, 1904
Range (as codes): TM Kp IR Elb TR AM Cc 04 12 13 30 51 56 65 04D 04Db 12A 12Ac 13F 30D 30Df 51B 51Ba 56F 56Fc 56Fj 65F 65Fe 65Fq 65K 65Z

16. *Biston stratarius* (Hufnagel, 1767) (Map 10)
Original Reference: Phalaena strataria Hufnagel, 1767, Berl. Mag. 4: 514, 622. Type(s): Deutschland: Berlin.
 Synonym(s): strataria Hufnagel, 1767; prodromaria [Denis & Schiffermüller], 1775; marmorata Sulzer, 1776; vernalis Fourcroy, 1785; nigricans Oberthür, 1913
Range (as codes): DZ Bsk PT ES FR Co Sa Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU BG TR Cc GG Mng Smt DK NO SE FI EE LV LT RU MD UA BY 01 05 13 33 34 42 01H 05A 13C 13Cd 13G 13G1 42B

17. *Campaea margaritaria* (Linnaeus, 1761)
Original Reference: Phalaena margaritaria Linnaeus, 1761, Fauna Suecica (2): 328. Syntypes: [Sweden: Stockholm]: Holmiae.
 Synonym(s): margaritaria Linnaeus, 1761; margaritata Linnaeus, 1767; vernaria Hufnagel, 1767; sesquistriaria Knoch, 1781; straminea Retzius, 1783; nayas Fourcroy, 1785; vitriolata Cyrilli, 1787; straminearia De Villers, 1789; rubrociliata Schawerda, 1932
Range (as codes): PT ES FR Co Sa Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG Lag Bku AZ DK NO SE FI LV LT RU MD UA BY 05 06 08 14 16 34 37 39 52 57 61 65 75 80 81 05G 06R 06Rb 52G 52Gb 61K 65F 65Fr 75F 75Fb 80B 80Bc

18. *Camptogramma bilineatum* (Linnaeus, 1758)
Original Reference: Phalaena (Geometra) bilineata Linnaeus, 1758, Syst. Nat. (Edn.10) 1: 525. Type(s): "Habitat in Suecia". Synonym(s): bilineata Linnaeus, 1758; brocatella Fourcroy, 1785; dumetata Schrank, 1802; bilinearia Boisduval, 1840; musauria Freyer, 1846; testaceolata Staudinger, 1871 Range (as codes): MA TN DZ Orn Clo PT ES Mu FR Co Si IT MT IE GB Sc Sht BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR Cr Rd TR AZ IQ IR Ab Oru Msw Ak Jal Fa Sse Mz Gls Kh DK NO SE FI EE LV LT RU Ur At MD UA Cm BY AZ Kir Ce AM GG KG TM Kp IL Pa LB Bsa 01 05 06 10 13 14 16 17 18 21 22 23 28 30 33 34 35 36 38 39 42 44 45 46 48 52 56 57 59 60 65 73 80 01B 01D 01K 05A 06R 06Rb 06Rd 10K 10Ka 13A 13Ab 13Ax 13C 13Cq 13F 13G 13Gd 13Gg 16A 21L 21Lf 28N 30D 30Df 30Dx 31D 33G 33R 36D 36Db 44F 44Fb 44L 44Lc 44O 44Oi 48G 48D 52A 52G 52Gb 56C 56Cc 56F 56Fa 56Fc 56F1 56Fn 56Fq 57E 60G 65A 65Ai 65Au 65At 65At2 65B 65Bn 65Bn1 65D 65Dl 65Dlc 65Do 65Doa 65F 65Fd 65F1 65Fz 65L 65Le 65N 65Np 65Nm 73A 73Ad 73Ad2 73D 73Df 80B 80Bc

19. *Cataclysme riguata* (Hübner, [1813])
Original Reference: Geometra riguata Hübner, [1813], Samml. eur. Schmett. 5: pl.69, fig.358. Type: Europa.
 Synonym(s): riguata Hübner, [1813]
Range (as codes): PT ES FR Co Si IT BE NL DE CH AT PL CZ SK HU RO YU AL BG GR TR AZ AM LT RU Tv MD UA BY IR Elb Mz Th AF TM Kp TJ KK T-S KG Lps At Ur Am Cm CN Ui Ku Cc GG Kir AZ AM 05 06 13 14 16 24 36 38 42 50 58 65 71 76 05A 13F 13F71 16A 36D 36Db 50G 58N 65A 65Ai 65Am 65Am4 76C

20. *Cataclysme subtilisparsata* Wehrli, 1932
Original Reference: Cataclysme riguata var. subtilisparsata Wehrli, 1932, Mitt. münchen. ent. Ges. 22: 7. Lectotype ♀: [Turkey]: "Syr. sept., Marasch, Achyr Dagh sept. Bertiz Jaila 1800m [Ağabeyli], designated by Stadie et al. (2014) [ZFMK].
 Synonym(s): subtilisparsata Wehrli, 1932; elbursica Wagner, 1937
Range (as codes): IR Mz Elb Th Mz Cc AM AZ TR 02 23 30 44 46 56 65 73 02F 02Fc 30B 30Bg 56F 56Fm 46G 46Gi 65Bx 65G 65Ge 73C 73Cd

21. *Catarhoe cuculata* (Hufnagel, 1767)
Original Reference: Phalaena cuculata Hufnagel, 1767, Berl. Mag. 4: 602. Type(s): Deutschland: Berlin.
 Synonym(s): cuculata Hufnagel, 1767; sinuata [Denis & Schiffermüller], 1775; sabinata Dannehl, 1933
Range (as codes): DZ TN ES FR IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU BG TR Cc GG Bjo Lag Hkd AM AZ DK NO SE FI EE LV LT RU Ur Sb Ya Am Sh MD UA BY CN Ui Kun Um KK Ik KG UZ MN 13 17 42 13F 42B

22. *Catarhoe permixtaria* (Guenée, [1858])
Original Reference: Melanippe permixtaria Guenée, [1858], Spec. Gén. Lépid. 10(2): 404. Type(s): [Lebanon]: Beyrut.

Synonym(s): #permixtaria Herrich-Schäffer,1851; permixtaria Guenée,[1858]

Range (as codes): IT RO YU MK BG GR TR LB AZ Nv Cc Kir Ord Tbl GG AM IR Gls TM Kp IL Pa Car Js JO 05 06 13 14 16 17 30 31 42 46 56 65 71 05A 13F 13G 13Gg 16A 30B 30Bd 30Bc1 30Bx 30D 30Df 31M 42B 56F 65A 65An 65At 65At5 65Ai 65B 65Bo 65Bx 65D 65Df 65Dg 65Dh 65F 65Fr 65Fm 65Fz 65G 65Gf 65Gy 65H 65Hg 65K 65Kl 65Z 65Kd 65Kg 65L 65Le 65N 65Np8 65Nm

23. *Catarhoe putridaria* (Herrich-Schäffer,[1852])

Original Reference: Larentia putridaria Herrich-Schäffer,[1852], Syst. Bearb. Schmett. Eur. 6: 78, fig.536. Type(s): [Aserbaidjan]: Elisabethpol [=Kirovabad].

Synonym(s): putridaria Herrich-Schäffer,[1852]; bulgariata Millière,1868

Range (as codes): ES FR Sa Si IT RO YU AL BG GR TR Cc GG Bjo Kir Ord AZ Nv AM IR Kh TM Kp LB Bsa IL Pa 05 06 25 38 42 58 65 76 05A 06R 06Rb 42B 58N 65D 65Df 65F 65Fz 65Fr 76C

24. *Catarhoe rubidata* ([Denis & Schiffermüller],1775)

Original Reference: Geometra rubidata [Denis & Schiffermüller], 1775, Ankündung syst. Werkes Schmett. Wienergegend: 113. Type(s): [Austria]: Vienna district.

Synonym(s): rubidata [Denis & Schiffermüller],1775

Range (as codes): PT ES FR IT GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG TR DK NO SE FI EE LV LT RU MD UA BY Ur IR Fa Shr Sse Elb Th Kdj Cc GG Tbl Bjo Lag Kir Hkd AZ AM RU Ur KK KG UZ TJ TM Kp 01 05 12 13 16 22 34 39 65 01J 05A 13B 13Ba 13G 13Gd 16A 65L 65Lb

25. *Charissa (Cnestrognophos) luticiliata* (Christoph,1887) (Map 11)

Original Reference: Gnophos luticiliatus Christoph,1887, [in] Romanoff, Mém. lépid. 3: 100-101, pl.v fig.3. Type ♂: [Turkmenistan]: "Askhabad".

Synonym(s): luticiliatus Christoph,1887

Range (as codes): IL Pa JO TR IR Mz OM TM Kp EG 65 65A 65Am 65Am2 65Am4

26. *Charissa (Cnestrognophos) mutilata* (Staudinger,1879) (Fig.2)

Original Reference: Gnophos mutilata Staudinger,1879, Horae Soc. ent. ross. 14: 457. Type ♂: [Türkei]: Amasia (Johann leg.).

Synonym(s): mutilata Staudinger,1879

Range (as codes): TR Cc AM 05 06 13 14 23 25 42 44 46 47 51 58 61 65 05A 13A 13Ac 13Ac1 13Ax 14E 25A 42B 44E 44Ei 44L 44Lc 46G 46Gi 51B 51Bc 58N 65D 65Df 65L 65Le

27. *Charissa (Cnestrognophos) rjabovi* (Wehrli,1929) (Map 12)

Original Reference: Gnophos rjabovi Wehrli,1939, Mitt. münchen. ent. Ges. 29(1): 77. Holotype 1♂: [Azerbaidjan]: Ordubad, 1600-1700m.

Synonym(s): rjabovi Wehrli,1929

Range (as codes): TR IR Ha Avd Cc AZ Nv Ord AM 25 65 65A 65Abc 65Am 65Am1 65Am2 65Am4 65D 65Df 65N 65Np2 65Nm

28. *Charissa (Euchrognophos) annubilata* (Christoph,1885) (Map 13)

Original Reference: Gnophos annubilata Christoph,1885, [in] Romanoff, Mém. lépid. 2: 103-104, pl.v fig.7. Type ♂: [Georgia]: "Khotchaldagh, près de Lagodekhi".

Synonym(s): annubilata Christoph,1885

Range (as codes): TR Cc AZ Nv Ord Lag GG IR Th Elb Mz Fa Shr Com Kz 53 56 65 73 53N 56F 56Fb 56Fj 56Fv 65F 65Fp 65Fz 65K 65Kl 65Kl3 65Z 73A 73Aç

29. *Charissa (Euchrognophos) dubitaria* (Staudinger,1892) (Map 14)

Original Reference: Gnophos ? dubitaria Staudinger,1892, Dt. ent. Z., Iris 5: 192-193. Syntypes: [Iran]: Schahrud; [Türkei]: Mardin.

Synonym(s): dubitaria Staudinger,1892

Range (as codes): TR LB Bsa Cc AM IR Fa Sse Com Kz 30 33 38 47 56 65 33A 33Ac 56F 56Fa 65A 65Am 65Am3 65Am4 65D 65Df 65N 65Np6 65Nm

30. *Charissa (Euchrognophos) nannodes* (Wehrli,1936)

Original Reference: Gnophos nannodes Wehrli,1936, Am. Papillons 1936: 151-152. Syntypes 9♂ 1♀: [Turquie]: "Wan Umgebung", 1900-2200m (ZSM).

Synonym(s): nannodes Wehrli,1936

Range (as codes): TR 65 65A 65Am 65Am4 65K

31. *Charissa (Euchrognophos) subtaurica* (Wehrli, 1934)

Original Reference: Gnophos variegata var. subtaurica Wehrli, 1934, Mitt. münchen. ent. Ges. 24 (2): 54, pl. 1 figs. 25, 26. Syntypes ♂♀: [Türkei]: Marasch, Akbes; [Lebanon]: Beirut (ZFMK).

Synonym(s): #subtaurica Wehrli, 1932; subtaurica Wehrli, 1934

Range (as codes): GR Sms TR LB Bei Bsa IL Pa Js CY JO 01 05? 07 16? 21 31 33 42 46 48 56? 65? 01B 01D 01G 01K 07B 21L 21Lc 31K 31Ka 31M 33A 33Ae 33Aj 33G 46G 48B 56F? 65K?

32. *Charissa (Kemtrognophos) argillata* (Brandt, 1938) (Map 15)

Original Reference: Gnophos argillata Brandt, 1938, Ent. Rdsch. 55: 620-621, fig. 415. Syntypes: Iran: [Fars]: Comée.

Synonym(s): argillata Brandt, 1938

Range (as codes): TR IR Kz Com Fa 65 65A 65Ai 65Aba 65Ac3 65D 65Df 65G 65Gb

33. *Charissa (Kemtrognophos) mardinaria* (Staudinger, 1901) (Map 16)

Original Reference: Gnophos obscuraria var. mardinaria Staudinger, 1901, Cat. Lep. palaearkt. Faunengeb. 3(1): 345, nr. 3931d. Type(s): [Türkei]: Mardin.

Synonym(s): mardinaria Staudinger, 1901

Range (as codes): TR IQ Dk IR Kd Snj 38 44 47 51 56 65 44L 44Lc 51B 51Bc 56F 56Fa 56Fb 56Fh 56Fö 56Fx 56Fw 56F6 65A 65Am 65Am4 65D 65Df 65F 65Fp 65Fz 65G 65Ge 65Bx

34. *Charissa (Kemtrognophos) onustaria* (Herrich-Schäffer, [1852]) (Fig. 3, Map 17)

Original Reference: Gnophos onustaria Herrich-Schäffer, [1852], Syst. Bearb. Schmett. Eur. 6: 73, figs. 496-497. Syntypes: [Türkei]: Amasia.

Synonym(s): onustaria Herrich-Schäffer, [1852]; oneraria Guenée, [1858]

Range (as codes): ES FR Co Sa Si IT RO YU AL BG GR TR GG Cc AZ AM IQ IL Pa JO IR Gls Kh 05 07 14 16 23 31 33 44 46 52 56 61 65 67 05A 16A 23M 23Ma 31M 44L 44Lc 52G 52Gb 56D 56Dd 56F 56Fb 56F1 56Fv 56F3 65A 65Ai 65An 65F 65Fb

35. *Charissa (Kemtrognophos) zeitunaria* (Staudinger, 1901) (Map 18)

Original Reference: Gnophos obscuraria var. zeitunaria Staudinger, 1901, Cat. Lep. palaearkt. Faunengeb. 3(1): 344, nr. 3931c. Type(s): [Türkei]: Taur. m. or. [=Zeitun].

Synonym(s): zeitunaria Staudinger, 1901

Range (as codes): TR Cr Cc AM Eri 06 13 18 25 33 42 46 51 56 65 71 06K 06Kc 13A 13Ac 13Ac2 13Ax 18F 25F 33A 33Ae 42B 46L 51B 51Bc 56F 56Fs 65B 65Bk 65D 65Df 65G 65K

36. *Charissa (Organognophos) wanensis* (Wehrli, 1936) (Map 19)

Original Reference: Gnophos wanensis Wehrli, 1936, Mitt. münchen. ent. Ges. 26: 36, Taf. ii. figs. 4, 8. Syntypes 4♂ 3♀: [Türkei]: "Umg. Wan, Kurdistan, 2400m Ende August, Anf. September".

Synonym(s): wanensis Wehrli, 1936

Range (as codes): IQ TR 04 13 65 04D 13A 13Ac 13Ac1 13Ax 65A 65Am 65Am4 65Bx 65D 65Df 65G 65Ge

37. *Charissa (s.str.) certhiata* (Rebel & Zerny, 1931) (Fig. 1)

Original Reference: Gnophos certhiatus Rebel & Zerny, 1931, Denkschr. Akad. Wiss. 103: 115-117, figs. 1, 2, 5. Syntypes: Albanien, Montenegro, Herzegowina, Bosnien.

Synonym(s): certhiatus Rebel & Zerny, 1931; bezengius Niesiolowski, 1953.

Range (as codes): B-H YU AL BG GR TR Cc AM GG 42 51 65 42B 51B 51Bc 65A 65Ab 65Aba

38. *Chesistege korbi* (Bohatsch, 1910)

Original Reference: Chesias korbi Bohatsch, 1910, Jb. Wien. ent. Ver. 20: 164. Syntypes: [Türkei, İğdir Prov., Tuzluca]: "Raupe auf Cephalaria procera über 2000m bei Takaltu oberhalb Kasikoparan (Russ. Armenien)".

Synonym(s): korbi Bohatsch, 1910

Range (as codes): TR JO IQ TM Kp Cc AM 06 13 24 30 31 46 56 58 65 71 76 13G 13Gö 13Gğ 30D 30Df 56F 56Fa 56Fb 56Fc 56Fç 56Fj 56Fw 58N 65A 65Am 65Am4 65D 65Df 65F 65Fp 65Fz 65N 65Nb 76C 76D 76Dj

39. *Chiasmia (Godonela) aestimaria* (Hübner, [1809])

Original Reference: Geometra aestimaria Hübner, [1809], Samml. eur. Schmett. 5: pl. 64 fig. 333. Type(s): Europa.

Synonym(s): aestimaria Hübner, [1809]; contemptata Guenée, [1858]; aestimata Herrich-Schäffer, 1861; tunesella Lucas, 1949.

Range (as codes): DZ Clo TN PT ES Mu FR Sa Si IT MT RO YU AL BG GR TR Cc AZ AM GG Ord Der Da Nv CY IQ Agh IR Mz GlS Fa Sse RU MD UA BY CN Ui Ku KK Ik IL Pa Jf Hf PK Nwf YE Hd YE68 o8 16 42 46 48 56 65 08H o8Ha 16A 42B 48L 56A 56Ac 56F 56Fi

40. *Chiasmia clathrata* (Linnaeus,1758)

Original Reference: Phalaena clathrata Linnaeus,1758, Syst. Nat. (Edn.10)1: 524. Type(s): Europa.
Synonym(s): clathrata Linnaeus,1758; almacola Wehrli,1934.

Range (as codes): MA DZ PT ES FR Co Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG AZ AM DK NO SE FI EE LV LT RU MD UA BY CN Ui Ju Kun Ii KG Ssn Lps o5 o6 o1 o3 o13 o14 o16 o18 o21 o22 o30 o31 o33 o34 o36 o42 o46 o49 o50 o56 o65 o71 o75 o80 o81 o5A o6R o6Rb o10K o10Ka o13Gö o13GöG 16A 18F 21N 21Nb 21Nc 21Nh 30B 30Bb 30Bk 31D 36D 36Db 49E 49Ea 49F 49Fb 56F 56Fg 65A 65Ai 65D 65Ds 65Dt 65F 65Fb 75F 75Fb 80B 80Bc

41. *Chlorissa asphaleia* Wiltshire,1966

Original Reference: Chlorissa asphaleia Wiltshire,1966, Z. Wien. ent. Ges. 51: 30-31, textfig.1, Taf.2 fig.3. Holotype ♂: Nordiran, Derbend, 2000m, 7-15.vi.1963.

Synonym(s): asphaleia Wiltshire,1966; #esphaleia Scoble,1999 [this incorrect spelling name was used by Scoble (1999: 139) as a valid name, as if it were a true species in the world].

Range (as codes): TR Cc IR Elb Th 36 65 36F 65D

42. *Chloroclysta miata* (Linnaeus,1758)

Original Reference: Phalaena miata Linnaeus,1758, Syst. Nat. (Edn.10)1: 526. Type(s): Europa.

Synonym(s): miata Linnaeus,1758; miaria [Denis & Schiffermüller],1775; viridifasciaria Goeze,1781; virgata Fourcroy,1785 nec Hufn.,1767; coraciata Hübner,[1799]; viridulata Zetterstedt,1839; coraciaria La Harpe,1853

Range (as codes): PT ES FR Co Sa IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU BG TR Arr Cc GG DK NO SE FI EE LV LT RU MD UA BY IR Fa Sse Elb Th AF TJ Pm o6 14 30 65 76 o6H o6R 14E 30D 30Df 65A 65Ai 65F 65Fp 65Fz

43. *Chloroclysta siterata* (Hufnagel,1767)

Original Reference: Phalaena siterata Hufnagel,1767, Berl. Mag. 4: 522. Type(s): Deutschland: Berlin.

Synonym(s): siterata Hufnagel,1767; psittacata [Denis & Schiffermüller],1775; rubroviridata Donovan,1810; psittacaria Boisduval,1840

Range (as codes): MA PT ES FR Sa Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG AM AZ DK NO SE FI EE LV LT RU Ur MD UA Cm BY 14 33 46 56 65 75 56F 56Fq 65D 75F 75Fb

44. *Cidaria fulvata* (Forster,1771)

Original Reference: Phalaena fulvata Forster,1771, Novae species Insectorum centuria I. 1: 76. Syntypes: England (ZMUC).

Synonym(s): fulvata Forster,1771; cuspidata Thunberg,1784

Range (as codes): ES FR Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc AM GG Mng DK NO SE FI EE LV RU MD UA BY o6 13 14 24 29 42 58 61 65 69 75 76 13G 13Gü 13Gw 42B 58N 61K 65B 65Bo 65Bx 65F 65Fp 65Fz 75F 75Fb 76C

45. *Cleta perpusillaria* (Eversmann,1847)

Original Reference: Acidalia perpusillaria Eversmann,1847, Bull. Soc. imp. Moscou 20 (2/3): 82, pl.6 fig.7. Lectotype ♂: Russia: Sarepta [Krasnoarmeysk] (ZISP).

Synonym(s): perpusillaria Eversmann,1847

Range (as codes): PT ES RU UA Cm TR Cc AM TM o5 39 42 65 65L 65Le 65N 65Ns 65Nm

46. *Coenotephria ablutaria* (Boisduval,1840)

Original Reference: Eubolia ablutaria Boisduval,1840, Genera index meth. eur.: 203, Type: "Gall. mer." [without description; simply nomen nudum!]

Synonym(s): ablutaria Boisduval,1840; probaria Herrich-Schäffer,1852; ruficinctaria Guenée,[1858]; ochrearia Staudinger,1901

Range (as codes): FR IT Co Sa Si SS HV B-H YU GR BG RO UA CY Rd Cr EG Sn IL Pa Car Js IR Kd Fa IQ Brs Dia Cc GG Bjo AM o1 o5 16 17 27 29 31 33 34 35 42 46 48 56 65 o1G o1H o5A 27D 27Db 27Dd 31K 31Ka 33A 33Ac 33Ak 42B 48L 56F 65A 65Am 65Am2

47. *Colotois pennaria* (Linnaeus,1761)

Original Reference: Phalaena Geometra pennaria Linnaeus,1761, Fauna Suecica: 324. Type(s): Sweden.

Synonym(s): pennaria Linnaeus,1761; cerasi Fabricius,1775; bifidaria Haworth,1809

Range (as codes): DZ Ges MA PT ES Mu FR Co Sa Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR Cr TR Cc GG Bjo DK NO SE FI EE LV LT RU Us MD UA BY CY o1 o5 o6 12 13 22 33 34 39 52 56 65 75 o1G o1H o5A o6R o6Rb 12A 12Ab 13C 13Cd 13Ce 52G 52Gb 56F 56Fb 56Fo 65A 65An 65Am4 65L 65Le 75F 75Fb

48. *Comibaena bajularia* ([Denis & Schiffermüller], 1775)

Original Reference: Geometra bajularia [Denis & Schiffermüller], 1775, Ankündung syst. Werkes Schmett. Wienergegend: 97. Type(s): [Austria]: Vienna district.

Synonym(s): pustulata Hufnagel, 1767 nec Müller, 1764; bajularia [Denis & Schiffermüller], 1775

Range (as codes): PT ES FR Co Sa Si IT GB BE NL LU DE CH AT PL CZ SK HU RO YU BG GR Cr TR DK SE FI EE LV LT RU Cc GG Mng MD UA BY 07 13 14 31 32 37 39 42 52 57 60 61 13G 13Gg 31F 31K 31Ka 52G 52Gb 60H 60Hb 61K 61Ka

49. *Costaconvexa polygrammata* (Borkhausen, 1794)

Original Reference: Phalaena polygrammata Borkhausen, 1794, Natur. eur. Schmett. 5: 560. Syntypes: Europa.

Synonym(s): polygrammata Borkhausen, 1794; polygrammaria Haworth, 1809; conjunctaria Lederer, 1853; #rosea Wiltshire, 1946

Range (as codes): PT ES FR Co Sa Si IT GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR Cr TR Cc AZ GG Tbl Lag Kir Len AM LB IL Pa IQ IR Fa Shr Mz Kh AF DK SE FI LV LT RU Ur KK KG TJ UZ TM MD UA Cm BY CN Ui Ku 01 05 18 33 42 65 01B 01D 01G 01H 01J 05A 33R 42B 65A 65Ai

50. *Crocallis (s.str.) inexpectata* Warnecke, 1940

Original Reference: Crocallis inexpectata Warnecke, 1940, Mitt. münchen. ent. Ges. 30 (3): 1054. Type $\hat{\circ}$: [Türkei]: Amasya, 400m.

Synonym(s): inexpectata Warnecke, 1940

Range (as codes): GR Sms Cc TR RU Da 05 08 18 25 33 42 50 51 52 56 58 62 65 66 05A 25F 33E 42B 50G 50Gd 51B 52C 56F 58G 58Gd 58R 62E 65Bx 65G 65Ge 65N 65Nm 66P

51. *Crocallis (s.str.) loebeli* Stadie & Fiebig, 2014

Original Reference: Crocallis loebeli Stadie & Fiebig, 2014, Esperiana 19: 239-241, figs. Holotype $\hat{\circ}$: Türkei, Prov. Sivas, Gürün Gökpınar (ZSM).

Synonym(s): loebeli Stadie & Fiebig, 2014

Range (as codes): TR 02 07 30 38 44 50 58 62 65 70 02F 02Fc 07A 30B 30Bc 38E 44E 44F 44Fb 50G 50Gd 58G 58Gh 58G 62G 65A 65Ai

52. *Crocallis (s.str.) rothei* Stadie & Fiebig, 2014

Original Reference: Crocallis rothei Stadie & Fiebig, 2014, Esperiana 19: 244-246, figs. Holotype $\hat{\circ}$: Türkei east Provinz Hakkari, 6,5km west. von Hakkari 2500-2600m leg. R.Fiebig & S.Rothe (ZSM).

Synonym(s): rothei Stadie & Fiebig, 2014

Range (as codes): TR 04 30 65 04D 04Da 30B 30Ba 30Bc 65F 65Fe

53. *Cyclophora linearia* (Hübner, [1799])

Original Reference: Geometra linearia Hübner, [1799], Samml. eur. Schmett. 5: pl.13, fig.68. Type: Europa.

Synonym(s): zonata Fourcroy, 1785; De luteolaria Villers, 1789; linearia Hübner, [1799]; strabonaria Zeller, 1851

Range (as codes): PT ES FR Co IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU BG GR TR AZ GG DK NO SE LV LT RU MD UA Cm Cc GG Lag AZ AM IR Elb 01 14 22 31 34 37 39 52 61 65 81 31D 52C 52G 52Gb 61K 61Ka 65A 65Ai

54. *Cyclophora porata* (Linnaeus, 1767)

Original Reference: Phalaena porata Linnaeus, 1767, Systema naturae 12: 866. Type(s): "Italia".

Synonym(s): porata Linnaeus, 1767; huebneraria Haworth, 1809; poraria Latreille, 1825

Range (as codes): PT ES FR Co Sa Si IT MT GB BE NL DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG Bjo Lag Len AZ DK SE LT RU MD UA Cm BY IL Pa Hf Car IR Elb Mz 05 13 14 16 22 39 46 59 75 05A 13G 13Gg 16A 75F 75Fd

55. *Cyclophora punctaria* (Linnaeus, 1758)

Original Reference: Phalaena punctaria Linnaeus, 1758, Syst. Nat. (Edn.10)1: 522. Type(s): Finlandia.

Synonym(s): punctaria Linnaeus, 1758; amata Linnaeus, 1758; teutonaria Linnaeus, 1758; amataria Linnaeus, 1761; fultaria De Villers, 1789; communifasciata Donovan, 1808; unifasciata Donovan, 1808; subangularia Haworth, 1809; acutaria Roquette, 1857; naevata Bastelberger, 1900

Range (as codes): PT ES FR Co Sa Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG Lag Kir Mng Smt Len AZ AM DK NO SE FI EE LV LT RU Pja MD UA Cm BY IR Elb 01 05 08 13 16 17 34 42 46 52 55 56 60 81 01G 05A 13F 13F 13F 16A 46G 46Gf 52G 52Gb 56F 60H 60Hb

56. *Cyclophora pupillaria* (Hübner, [1799])

Original Reference: Geometra pupillaria Hübner, [1799], Samml. eur. Schmett. 5: pl.13, fig.69. Type: Europa.

Synonym(s): pupillaria Hübner,[1799]; nolaria Hübner,1809; gyrata Hübner,[1813]; gyraria Treitschke,1827; mirtalis Costa,1834; calaritana Turati,1911; asiaeminoris Amsel,1935; granti L.B.Prant,1935

Range (as codes): MA DZ Ges TN Az PT ES Mu FR Co Sa Si IT MT IE GB NL DE CH AT SK HU RO YU AL BG GR Cr Rd TR Cc GG Aj Akh DK SE RU MD UA BY IR Fa IL Pa Hf Car LB Bsa 01 06 07 14 16 17 31 33 34 42 45 46 48 52 58 65 80 81 01B 01D 01G 01H 16A 31A 31D 31F 31K 31Ka 31Ka5 33A 33Ac 33Ad 33Aj 42B 46B 46F 46L 48D 52G 52Gb 58N 65A 65Ai 80B 80Bc

57. *Cyclophora quercimontaria* (Bastelberger,1897)

Original Reference: Zonosoma quercimontaria Bastelberger,1897, Stettin ent. Ztg. 58: 120.

Syntypes: Deutschland: Rheingau: Eichberg.

Synonym(s): quercimontaria Bastelberger,1897; nigrosparsaria Scoble,1999; privataria Scoble,1999

Range (as codes): PT ES FR IT NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR DK NO SE FI EE LV LT RU MD UA Cm BY Cc GG AM AZ IR Elb Mz 08 14 52 65 81 52G 52Gb 65F 65Fp

58. *Dasy corsa modesta* (Staudinger,1879)

Original Reference: Dasycephala modesta Staudinger,1879, Horae Soc. ent. ross. 14: 445. Type ♀: [Türkei]: Taurus (Haberhauer leg.).

Synonym(s): modesta Staudinger,1879

Range (as codes): RO YU BG GR CY TR LB Bsa IL Pa Tbs IQ IR 01 05 14 17 21 22 30 31 33 34 39 42 44 46 48 49 56 59 65 71 73 01H 01J 17H 21N 21Nh 31K 31Ka 31M 33A 33Ak 39G 42B 44L 44Lc 48L 49F 49Fb 56A 65Ac 56F 65A 65An 65Am 65Am2 65D 65Df 65E 65F 65Fd 65F1 65Fz 65K 65Kl 65Kl3 65Z 65Ky 65Ky1 65N 65Nm 65Np 73A 73Ac

59. *Docirava mundata* (Staudinger,1892)

(Fig. 4)

Original Reference: Anaitis mundata Staudinger,1892, Dt. ent. Z., Iris 5: 216-217. Syntypes: [Lebanon]: Beirut.

Synonym(s): mundata Staudinger,1892

Range (as codes): TR LB Bei 01 05 13 38 42 44 46 56 58 65 66 01H 05A 13A 13Ab 13Ax 38H 38Hc 42B 44E 44Eh 44O 44Ob 46G 46Gf 56F 56Fc 56Fq 56Fs 65D 65Df 65F 65Fp 65Fq 65Fz 65N 65Nm 65Np1 65Nm

60. *Docirava mundulata* (Guenée,[1858])

Original Reference: Anaitis mundulata Guenée,[1858], [in] Boisduval & Guenée, Hist. nat. Insectes (Spec. gen. Lepid.) 10: 496. Syntypes 2♂ 1♀: [Lebanon]: Beyrouth.

Synonym(s): mundulata Guenée,[1858]; submundulata Staudinger,1892

Range (as codes): LB Bei TR JO IL Pa Car Hf Js 13 21 23 30 31 46 47 63 65 73 05A 13F 31K 31Ka 31Ka3 47D 63E 65A 65Am 65Am4 65K 65Ku 65Z 73Aç 73Aç2

61. *Docirava musculata* (Staudinger,1892)

Original Reference: Anaitis musculata Staudinger,1892, Dt. ent. Z., Iris 5: 218-219, Taf.2 f.19. Syntypes: [Türkei]: Amasia, Karahisar, Malatia, Kaisarie, Charput.

Synonym(s): musculata Staudinger,1892

Range (as codes): GR Ae Sms TR IQ IR TM 05 23 25 28 30 33 38 44 46 51 62 65 71 05A 23D 23Dc 28N 30D 30Df 44E 44Ei 44L 44Lc 62H 65A 65Am 65Am4 71B 71Ba

62. *Drepanopterula limaria* (Christoph,1885)

(Map 20)

Original Reference: Epione limaria Christoph,1885, [in] Romanoff, Mém. lepid. 2: 97, pl.5 fig.6.

Type ♀: [Azerbaijan]: Ordubad.

Synonym(s): limaria Christoph,1885

Range (as codes): TR Cc AZ Nv Ord 56 65 56F 65A 65Am 65Am4

63. *Dyscia (Calodyscia) innocentaria* (Christoph,1885)

Original Reference: Aspilates innocentaria Christoph,1885, Mém. lepid. 2: 125, pl.6 fig.5. Lectotype ♀: Turkmenia, Achal Tekke, Nuchur, designated by Trusch & Erlacher (2002: 535) (ZISP).

Synonym(s): innocentaria Christoph,1885; #innocentana Pugaev & Zolotuhin,2006

Range (as codes): Co Sa Si IT YU HV AL MK BG RO Do GR RU Ao MD UA Cm TR IQ Er Ama Shq IR Gor Glz Kh TM Kp Noc JO Amm IL Pa Hf Js SY Dms CY Cc Da GG Bjo Lag AZ Kir AM Eri AF KG UZ Smk CN Ui Au 01 05 06 07 13 14 16 17 18 20 21 25 27 30 34 35 36 38 42 44 45 46 47 50 56 65 71 13A 13Ab 13Ax 21L 21Lc 27D 27Db 42B 47D 47Da 56F 65A 65Ai 65Am 65Am1 65Am3 65Am4 65D 65Df 65F 65Fp 65Fz 65L 65Le 65N 65Nm 65Np 65Np7 65Nm

64. *Dyscia (s.str.) conspersaria* ([Denis & Schiffermüller],1775)

Original Reference: Geometra conspersaria [Denis & Schiffermüller],1775, Ankündung syst. Werkes Schmett. Wienergegend: Type(s): [Austria]: Vienna district. Neotype ♂ designated by Trusch & Erlacher (2002: 531) (ZFMK).

Synonym(s): conspersaria [Denis & Schiffermüller],1775; cuniculina Hübner,1790; cunicularia Esper,1803; turturaria Boisduval,1840; #conspersana Pugaev & Zolotuhin,2006

Range (as codes): ES FR IT AT CZ SK HU RO GR Rd TR Cc GG AM Eri AZ RU MD UA BY 01 05 06 14 16 17 18 22 25
31 34 35 36 39 42 46 50 51 58 60 65 70 75 05A 06R 06Rd 16A 17H 31O 42B 65D 65Dh

65. *Dyscia (s.str.) lentiscaria* (Donzel,1837)

Original Reference: Crocallis lentiscaria Donzel,1837, Annls Soc. ent. Fr. 6: 13, pl.1 figs.1,2.

Synonym(s): lentiscaria Donzel,1837; agaces Oberthür,1923

Range (as codes): DZ Ges PT ES Mu FR IT TR Cc AM 58 65 58N 65D 65Du

66. *Eilicrinia cordiaria* (Hübner,1790)

Original Reference: Phalaena cordiaria Hübner,1790, Beitr. Gesch. Schmett. 2(1): 31, Tab.4 fig.Z.

Synonym(s): cordiaria Hübner,1790

Range (as codes): AT SK HU RO YU BG GR RU MD UA BY TR Cc AZ Nv AM GG Lag Kir Ord Der Da IQ Dk IR FA Sse IN Kul Hp 01 06 09 13 14 16 18 22 30 36 38 42 44 45 46 51 56 58 59 61 65 71 73 01B 01H 13F 13F38 13F7 13F71 16A 18F 36D 36Db 38K 42B 46G 46Gf 56F 56Fn 58N 61K 65A 65Ai 65Am 65Am2 65Am4 65An 65F 65Fm 65H 65Hb 65N 65Np6 65Nm 73A 73Ad1

67. *Eilicrinia subcordaria* (Herrich-Schäffer,[1852])

Original Reference: Macaria subcordaria Herrich-Schäffer,[1852], Syst. Bearb. Schmett. Eur. 6: 71, fig.446. Type(s): Türkei.

Synonym(s): tritomata Fischer de Waldheim,1840; subcordaria Herrich-Schäffer,[1852]; anicularia Eversmann,1852; freitagaria Möschler,1854; subcordata Herrich-Schäffer,1861.

Range (as codes): TR IR Kz Fa Com RU Ur CN Ui Khr Ku Ga KK Ik KG Ssn UZ Fe 65 76 65F 65Fr 76A 76Ac

68. *Ematurga atomaria* (Linnaeus,1758)

Original Reference: Phalaena atomaria Linnaeus,1758, Syst. Nat. (Edn.10)1: 521. Type(s): [Europa], in Tilia.

Synonym(s): atomaria Linnaeus,1758; isoscelata Scopoli,1763; pennata Scopoli,1763; aceraria Hufnagel,1767; artemisaria Herbst,1782; picta, microcosa Fourcroy,1785; glarearia Hübner,[1799]; obsoletaria Zett.,1839; minuta Heydemann,1925; arenaria Candeze,1926.

Range (as codes): PT ES FR Co Sa Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG Bjo Lag AZ AM DK NO SE FI EE LV LT RU MD UA BY CN Ui Ii Ku Gn KG Tk 05 06 11 12 13 14 16 17 22 33 34 37 39 41 45 52 54 55 57 58 60 67 74 81 05A 12A 12Ab 13F 13G 13Gö 13Gs 13Gw 16A 33G 37F 52G 52Gb 52J 52Ja 58N 60H 60Hb

69. *Enanthyperythra legataria* (Herrich-Schäffer,[1852])

(Map 21)

Original Reference: Hypoplectis legataria Herrich-Schäffer,[1852], Syst. Bearb. Schmett. Eur. 6 (55): 71. Syntypes: [Europe?].

Synonym(s): legataria Herrich-Schäffer,[1852]

Range (as codes): MK GR? TR Cc AZ Nv Ord 05 06 14 16 32 44 56 65 70 05A 16A 44L 44Lc 56D 65A 65Am 65Am1 65D 65Dy 65L 65Le 70C 70Cf

70. *Ennomos (Deuteronomos) fraxineti* Wiltshire,1947

Original Reference: Ennomos ? effractaria ssp. fraxineti Wiltshire,1947, Entomologist's Rec. J. Var. 59: 111, pl.v fig.11. Holotype \uparrow : Tehran: Darband, 6000ft.

Synonym(s): effractarius sensu Wehrli,1934; fuscantaria sensu Wiltshire,1946; fraxineti Wiltshire,1947

Range (as codes): TR IR Elb Th Gls IQ Slf 13 30 42? 44? 56 65 80 13C 13Cd 13F 13F38 30B 30Bc1 42B? 44L? 56F 56Fq 65A 65Ai 80B 80Bb

71. *Ennomos (Deuteronomos) quercarius* (Hübner,[1813])

Original Reference: Geometra quercaria Hübner,[1813], Samml. eur. Schmett. 5: pl.80, figs.411,412. Syntypes: Europa.

Synonym(s): quercaria Hübner,[1813]

Range (as codes): PT ES An FR Si IT CH AT PL SK HU RO YU MK AL BG GR Cr TR Cc GG Mng Smt AZ AM IR Gls Fa IQ RU MD UA Cm BY CY Cr LB Bsa IL Pa JO 05 07 14 30 31 33 34 42 55 56 60 65 05A 14I 31A 31Ab 42B 55F 56F 56Fb 65A 65Am 65Am4 65Ai

72. *Entephria ignorata* (Staudinger,1892)

Original Reference: Cidaria ignorata Staudinger,1892, Dt. ent. Z., Iris 5: 235-236. Type: [Russia]: [Daghestan]: Kurusch.

Synonym(s): ignorata Staudinger,1892

Range (as codes): TR RU Da Kus Cc IR Elb Mz TM Kp 13 51 69 13G 13Gw 51B 69B 69Ba

73. *Euphyia frustata* (Treitschke, 1828)

Original Reference: Acidalia frustata Treitschke, 1828, Schmett. Eur. 6 (2): 50. Syntypes: Hungary, Austria.

Synonym(s): frustata Treitschke, 1828; muscosata Donzel, 1837

Range (as codes): MA DZ PT ES FR Co Sa Si IT BE LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG Bjo Kir AZ AM IQ LB Bsa 05 42 46 60 61 65 05A 42B 46G 46Gi 46F 65A 65Am 65Am1 65Am4 65D 65Df 65Fz

74. *Euphyia scopulata* (Brandt, 1938)

Original Reference: Cidaria (Euphyia) scopulata Brandt, 1938, Ent. Rdsch. 55: 585-586, figs. 319-323.

Syntypes: Iran: Barm i Firus. Synonym(s): scopulata Brandt, 1938

Range (as codes): TR IR Kz B-F 65 65F 65Fp

75. *Eupithecia breviculata* (Donzel, 1837)**(Map 22)**

Original Reference: Melanthia breviculata Donzel, 1837, Annls Soc. ent. Fr. 6: 478, pl. 18 fig. 7. Type: France, Hyères.

Synonym(s): breviculata Donzel, 1837; anatolica Schwingenschuss, 1939 [ssp.]; georgica Vojnits, 1977 [ssp.]

Range (as codes): MA DZ Onç TN PT ES FR Co Sa Si IT MT DE CH HU RO YU AL BG GR Cr Rd TR Cc AZ Lag Kir Len Nv SY RU UA IL Pa CY JO IR Mz TM Kp Da 01 05 06 10 14 16 17 21 30 31 35 36 39 42 46 56 65 71 80 01D 01G 01H 01J 05A 06R 10K 10Ka 16A 21N 21Nb 21Nc 21Nh 30D 30Df 31M 36D 36Db 42B 56F 65A 65Am 65Am4 65At 65At5 65D 65Dg 65F 65Fg 65Fp 65Fz 65L 65Le 80B 80Bc

76. *Eupithecia denticulata* (Treitschke, 1828)

Original Reference: Larentia denticulata Treitschke, 1828, Die Schmett. Eur. 6 (2): 132-133. Lectotype $\hat{\circ}$: Ungarn: Ofen (HNHM).

Synonym(s): denticulata Treitschke, 1828

Range (as codes): ES FR DE CH SK HU RO BG TR Cc GG Bjo AM 04 06 25 31 42 58 65 66 75 76 04D 06E 06Ea 06R 06Rb 58N 65D 65Df 65Fz 66P 75F 75Fd 76C

77. *Eupithecia distinctaria* Herrich-Schäffer, [1848]

Original Reference: Eupithecia distinctaria Herrich-Schäffer, [1848], Syst. Bearb. Schmett. Eur. 3: 121, 131, f. 162-163. Syntypes: [Deutschland]: Regensburg.

Synonym(s): distinctaria Herrich-Schäffer, [1848]; constrictata Guenée, [1858]; sextiata Dardoin & Millière, 1867; piemonticola Schwingenschuss, 1954

Range (as codes): MA PT ES FR Co IT IE GB DE CH AT PL CZ SK HU RO YU AL BG GR TR AZ Nv Ord Cc GG SE LT RU UA Cm LB Bsa 07 14 33 42 46 65 42B

78. *Eupithecia extremata* (Fabricius, 1787)

Original Reference: Phalaena extremata Fabricius, 1787, Mant. Ins. 2: 211, nr. 118. Type(s): Austria.

Synonym(s): extremata Fabricius, 1787; glaucomictata Mann, 1855; hangayi Vojnits, 1977.

Range (as codes): LY PT ES FR Co Si DE AT SK HU RO YU AL BG GR TR IQ RU MD UA BY Cc AZ Kir IL Pa Tbs Car LB Bsa IR 06 21 31 32 33 35 42 45 46 56 65 06R 21N 21Nh 31K 31Ka 31M 32C 42B 56F 65A 65Ai 65Am 65Am4 65F 65Fr 65Fp 65Fz

79. *Eupithecia gemellata* Herrich-Schäffer, 1861

Original Reference: Eupithecia gemellata Herrich-Schäffer, 1861, Corresp. Bl. Samml. Ins. Schmett. 2 (17): 131. Syntypes: Engadin, Tyrol.

Synonym(s): gemellata Herrich-Schäffer, 1861; schmidii Dietze, 1872

Range (as codes): FR Co Si IT CH AT HU RO YU AL BG GR TR LB Bsa 13 16 46 13F 13F7 13F71 16A

80. *Eupithecia gratiosata* Herrich-Schäffer, 1861**(Map 23)**

Original Reference: Eupithecia gratiosata Herrich-Schäffer, 1861, Neue Schmett. 3: 27, fig. 135. Type(s): Patria incognita.

Synonym(s): gratiosata Herrich-Schäffer, 1861; subseparata Christoph, 1885

Range (as codes): MA DZ TN PT ES FR Sa Si IT PL RO YU AL BG GR TR IQ LB Bsa Cc GG AZ IR 16 25 30 31 45 56 58 65 16A 30D 30Df 56F 58N 65A 65Am 65Ai 65Am1 65At 65At5 65D 65F 65Fd 65Fr

81. *Eupithecia gueneata* Millière, 1862

Original Reference: Eupithecia gueneata Millière, 1862, Icon. descr. chen. lépid. inedits 1 (6): 257-259, 279, pl. 1 figs. 1, 2. Type: France, "Ardèche".

Synonym(s): gueneata Millière, 1862; busambraria Ragusa, 1889

Range (as codes): MA ES FR Si IT CH AT PL CZ SK HU RO YU AL GR TR Cc AZ Lag TM Kp IR AM 04 30 65 30B 30Bd 30Bx 30D 30De 30Df 65A 65Ai 65Am 65Am4 65B 65Bo 65Bx 65D 65Df 65F 65Fp 65Fz 65G 65Gf 65Gy

82. *Eupithecia icterata* (De Villers, 1789)

Original Reference: Phalaena icterata De Villers, 1789, Carol. Linn. ent. 2: 382. Syntypes: France: Gallia.

Synonym(s): icterata De Villers, 1789; oxydata Treitschke, 1828; cognata Stephens, 1831; ligustigata Donzel, 1838; ferrugata Duponchel, 1842; #ligisticata Dietze, 1910

Range (as codes): MA ES FR Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc Arr GG Bjo Mng Lag Da DK NO SE FI EE LV LT RU MD UA Cm IQ IR Elb Mz KG 14 36 65 76 80 36F 76C

83. *Eupithecia limbata* Staudinger, 1879

Original Reference: Eupithecia limbata Staudinger, 1879, Horae Soc. ent. ross. 14: 476. Syntypes: [Türkei]: Amasia (Kerasdere).

Synonym(s): limbata Staudinger, 1879; irritaria Staudinger, 1892; kueppersi Vojnits, 1973

Range (as codes): PT ES An IT SS MK BG GR Cr TR Ksp IQ AM Nv Cc AZ LB IR 05 13 25 30 42 65 76 05A 13A 13Ab 13Ax 42B 65D 65Df 65Fz 76C

84. *Eupithecia mesogrammata* Dietze, 1908

Original Reference: Eupithecia mesogrammata Dietze, 1908, Dt. ent. Z., Iris 21: pl.2 fig.26. Syntypes: [Iran: Schahkuh (Prout, 1914: 278)].

Synonym(s): mesogrammata Dietze, 1908; #nesogrammata L.B. Prout, 1914; kunzi Pinker, 1976

Range (as codes): IR Cc AM TR 06 13 13G 13Gw

85. *Eupithecia oblongata* (Thunberg, 1784)

Original Reference: Geometra oblongata Thunberg, 1784, Diss. ent. sistens Insecta Suecica 1: 14. Lectotype \uparrow (UZIU).

Synonym(s): #centaureata [Denis & Schiffermüller], 1775; oblongata Thunberg, 1784; boloniensis Fourcroy, 1875; centralisata Staudinger, 1892; chamae Vojnits, 1977.

Range (as codes): MA DZ Ges TN PT ES FR Co Sa Si IT MT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR Cr Rd CY TR Cc GG Tbl Kir Lag AM AZ DK NO SE FI EE LV LT RU Da Us MD UA BY KG Ssn Tk CN Ui Ku Stg Kwa IL Pa Car Jf LB Bsa PK Ch IN Ld Gg KK Ax UZ Smk AF Nu Bd TW 01 05 06 14 16 17 34 42 44 46 52 55 56 58 65 71 01D 05A 06K 06Kc 13A 13Ac 13Ac2 13Ax 16A 34H 36D 36Db 42B 42J 42Xa 44E 44Ei 52G 52Gb 55F 56F 56Fv 58N 65D 65Df 65Dg 65Dga 65F 65Fz 65L 65Lb 65N 65Np1 65Np6 65Nm

86. *Eupithecia siata* Brandt, 1938

Original Reference: Eupithecia siata Brandt, 1938, Ent. Rdsch. 55: 701, figs. 427-428. Syntypes: Iran: Comee, im August.

Synonym(s): siata Brandt, 1938

Range (as codes): IR Fa Com Kz TR 13 13G

87. *Eupithecia silenicolata* Mabille, 1867

Original Reference: Eupithecia silenicolata Mabille, 1867, Annls Soc. ent. Fr. (4) 6: 562, pl.8 figs. Lectotype ♀: Corsica: Bastia (ZSM).

Synonym(s): silenicolata Mabille, 1867

Range (as codes): MA FR Co IT CH? AT SK HU RO YU BG GR TR LB Bei Bsa IR Lo Ab PK Sha Ld 05 42 46 56 65 05A 42B 56F

88. *Eupithecia venosata* (Fabricius, 1787)

Original Reference: Phalaena venosata Fabricius, 1787, Mant. Ins. 2: 209, nr.205. Type(s): Austria: [Wien].

Synonym(s): venosata Fabricius, 1787; insignata Hübner, 1789; decussata Donovan, 1799; comparanda Vojnits, 1981

Range (as codes): MA PT ES FR Co Sa Si IT MT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG Bjo Mng Lag AZ DK NO SE FI EE LV LT RU Sb MD UA BY PK Swa Klm Sha Ch AF Nu 05 16 21 30 61 65 05A 16A 21L 21Lc 30D 30Df 61K 65A 65Ai 65D 65Dy 65F 65Fr

89. *Eupithecia vulgata* (Haworth, [1809])

Original Reference: Phalaena vulgata Haworth, [1809], Lepid. brit.: 359. Type(s): Britannia.

Synonym(s): vulgata Haworth, [1809]; pygmaeata Borkhausen, 1794; clusterata Hübner, [1813]; austera Herrich-Schäffer, 1848; atropicta Dietze, 1910; cyrneata Schawerda, 1933

Range (as codes): MA PT ES FR Co IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG TR DK NO SE FI EE LV LT RU Us MD UA BY KG Lps CN Ui Arc LB Bsa AF Pag Kab Sfk Kbb Wk 07 14 61 65 65F 65Fp 65Fz

90. *Glossotrophia (Libanonia) sacraria* (A.Bang-Haas,1910)

Original Reference: Acidalia sacraria A.Bang-Haas,1910, Dt. ent. Z., Iris 24: 42, Taf.iii fg.18.
Syntypes: [Kazachstan]: "Uralsk".

Synonym(s): sacraria A.Bang-Haas,1910

Range (as codes): GR Rd LB Bei TR CY JO IL Pa IQ AF Srb Kab Bm PK TJ Pm IR Shr Fa Sse Com Kz KG Uk 21 27 30 31 46 56 65 21L 21Lc 27D 30D 30Df 56F 65A 65Am 65Am1 65Am4 65Ai

91. *Glossotrophia (s.str.) diffinaria* L.B.Prout,1913

Original Reference: Glossotrophia diffinaria L.B.Prout,1913, [in] Seitz,A., Die Gross-Schmett. Erde 4: 83 (nomen novum pro luridata Staudinger nec Zeller).

Synonym(s): luridata Staudinger,1871 nec Zell.; diffinaria L.B.Prout,1913 Range (as codes): GR Rd TR Cc AM 08 24 42 46 50 58 65 68 42B 46G 46Gi 50G 50F 58G 65A 65Am 65Am1 65Am4 65D 65Df 68B

92. *Gnopharmia colchidaria* (Lederer,1870)**(Map 24)**

Original Reference: Gnophos colchidaria Lederer,1870, Annls Soc. ent. Belg. 13: 39,48-49, pl.2 fig.1. Type ♀: [Georgia]: Achalziche (MNHU) (Azerbaijan: Helenendorf [Göygöl] (see Rajaei et al.,2012)).

Synonym(s): colchidaria Lederer,1870; melanotaenia Wehrli,1938

Range (as codes): TR Cc GG Akh IL Pa TM Kp IQ AZ Kir Nv Ord Dz AM IR Ab Mak Khy Fa Sse Mz Gls Shr Hz Ke Kd Ha Km Ss Th Elb Kdj Lo Es Snj Sqq Bne PK Bl Zi Qu 13 21 23 27 30 31 46 56 13F 13F7 13F71 21L 21Lc 30B 30Be 46G 46Gf 56F

93. *Gnopharmia irakensis* Wehrli,1938**(Map 25)**

Original Reference: Gnopharmia irakensis Wehrli,1938, Ent. Rdsch. 55 (37): 433. Syntypes 1♂ 2♀: [Iraq]: Rowanduz.

Synonym(s): irakensis Wehrli,1938

Range (as codes): TR IQ Riwz Er Ry IR Ab Oru Th Elb Fa Dam Shr Bk Es Kd Ha Ke Km Kh Kdj Qz Kz Lo PK Nwf Bl Zi AF Kab Bm Srb 30 44 47 56 63 65 44L 44Lb 56F 63E 65A 65Ai 65Am1

94. *Gnophos (Dicrognophos) gorgatus* Brandt,1938**(Map 26)**

Original Reference: Gnophos gorgata Brandt,1938, Ent. Rdsch. 55: 617-620, figs. 404-408.
Syntypes: Iran: [Fars]: Comée, Sine-Sefid.

Synonym(s): gorgata Brandt,1938

Range (as codes): TR IR Kd Fa Sse Com Kz 30 65 65A 65Ai

95. *Gnophos (Dicrognophos) pseudosnelleni* Rjabov,1964**(Map 27)**

Original Reference: Gnophos pseudosnelleni Rjabov,1964, [in] Rjabov & Vardikjan, Zool. Sb. Erevan 13: 108, pls. Holotype ♂: Armenia: River Arpa, Daralagez.

Synonym(s): pseudosnelleni Rjabov,1964

Range (as codes): Cc AM Dar AZ TR TM Kp IR 13 56 62 65 13G 13Gw 56F 56Fa 56Fc 56Fd 56Fj 56Fq 62G 65A 65Ac 65Ac3 65Ai 65Am 65Am1 65Am4 65At 65At5 65B 65Bo 65D 65Df 65G 65Gb

96. *Gnophos (Dicrognophos) sartatus* Treitschke,1827**(Map 28)**

Original Reference: Gnophos sartata Treitschke,1827, Schmett. Eur. 6 (1): 175-177. Syntypes ♂♀: [Croatia]: "Dalmatien".

Synonym(s): sartata Treitschke,1827; syriaca Thierry-Mieg,1916. Range (as codes): Co Sa Si IT HV YU AL BG GR Pl Sms Cr Rd TR Cc GG AZ AM LB Bsa RU MD UA Cm BY SY IR Fa Sse IL Pa Mer Car Hf Js CY 05 06 14 16 17 20 21 27 30 31 34 35 42 45 46 56 65 80 05A 06K 06Kc 16A 17H 21L 21Lc 27E 31K 31Ka 31Ka5 42B 46G 46Gi 56F 65A 65Ai 65Ao 65Am 65Am4 80B 80Bc

97. *Gnophos (Dicrognophos) snelleni* Christoph,1887

Original Reference: Gnophos snelleni Christoph,1887, [in] Romanoff, Mém. lépid. 3: 96-98, pl. iv fig.13. Syntypes: [Turkmenistan]: "Germob"; [Iran]: "Schahrud".

Synonym(s): snelleni Christoph,1887

Range (as codes): TM Kp IR Elb Srd IQ TR Ger 13 65 13G 13Gü 13Gw 65F 65Fg

98. *Gnophos (Odontognophos) zacharius* (Staudinger,1879) (Map 29)

Original Reference: Gnophos zacharia Staudinger,1879, Horae Soc. ent. ross. 14: 454-455. Type ♀: [Türkei]: Amasia.

Synonym(s): zacharia Staudinger,1879

Range (as codes): Cr TR Cc RU Da 01 05 14 31 42 46 51 65 71 01H 05A 31M 42B 51B 51Bc 65A 65Ai 65Am 65Am4 65D 65Df

99. *Heliomata glarearia* (Brahm, 1791)Original Reference: Phalaena glarearia Brahm, 1791, Ins. Kal. 2 (1): 320, nr. 205.

Synonym(s): #glarearia [Denis & Schiffermüller], 1775; glarearia Brahm, 1791.

Range (as codes): FR Si IT DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG AZ AM IR GlS RU MD UA BY CN Ui Ku 01 05 06 13 14 16 29 30 36 37 39 43 49 56 60 65 71 75 76 01L 05A 06R 06Rd 13Gö 13Gę 16A 30Dx 36D 36Db 37F 49F 49Fb 56F 56Fw 60H 60Hb 65A 65Ac 65Ac3 65Ai 65Am 65Am1 65An 65As 65At 65At5 65D 65Dd 65Dda 65Df 65Dg 65Dl 65Dr 65Dn 65Ds 65Du 65F 65Fç 65Fr 65Fz 75F 76B 76Bj 76D 76Dd**100. *Heterolocha laminaria* (Herrich-Schäffer, [1852])**Original Reference: Hypolectis laminaria Herrich-Schäffer, [1852], Syst. Bearb. Schmett. Eur. 6: 71.

Synonym(s): laminaria Herrich-Schäffer, [1852]

Range (as codes): TR Cc GG Bjo Lag Akh Smt Dar AM RU Ro Am CN Tkg IR AF JP 13 14 16 61 13G 13G1 16A 61K**101. *Holoterpnia pruinosata* (Staudinger, 1898)**Original Reference: Eucrostis pruinosata Staudinger, 1898, Dt. ent. Z., Iris 10: 303. Lectotype ♂: [Israel]: Jerusalem (MNHU).

Synonym(s): pruinosata Staudinger, 1898

Range (as codes): IT TR SS MK LB Bsa IL Js Pa Cm 14 30 35 65 30D 30Df 65D**102. *Hypomecis punctinalis* (Scopoli, 1763)**Original Reference: Phalaena punctinalis Scopoli, 1763, Entomologia Carniolica: 217. Type(s): [Slovenien]: Carniola [Krain].

Synonym(s): punctinalis Scopoli, 1763; urticaria Hufnagel, 1767; turcaria Fabricius, 1775; griseonigra Goeze, 1781; bandevillaea Fourcroy, 1785; consortaria Fabricius, 1787; convexata Villers, 1789; leucopheataria De Villers, 1789; grisearia Bastelberger, 1902; magyarica Wehrli, 1932

Range (as codes): PT ES FR Co IT IE GB BE NL LU DE CH AT SS Mrb PL CZ SK HU RO YU AL BG GR TR CY DK SE FI EE LV LT RU Ur Sb MD UA BY KP KR JP TW 05 13 14 16 31 33 39 52 57 61 80 81 05G 13F 16A 31D 33A 33Ac 39B 52C 52G 52Gb 61K 61Ka 80B**103. *Idaea aversata* (Linnaeus, 1758)**Original Reference: Phalaena aversata Linnaeus, 1758, Syst. Nat. (Edn.10) 1: 526. Type(s): Finlandia.

Synonym(s): aversata Linnaeus, 1758; remutata Linnaeus, 1758; lividata Clerck, 1759; trilineata Hufnagel, 1767; grisata Fabricius, [1776]; murinata Fabricius, 1794; aversaria Hübner, [1799]; fuliginata Haworth, 1809; latifasciaria Heydenreich, 1851.

Range (as codes): DZ Hrh Dhm TN PT ES FR Co Sa Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG Bjo Dar Len Der Da AM AZ DK NO SE FI EE LV LT RU MD UA BY JP 05 14 16 22 31 34 39 42 44 52 54 59 61 65 75 81 05A 16A 31C 31K 31Ka 31Ka5 42B 44I 44Ic 52G 52Gb 61K 61Ka 65A 65Am 65D 65L 65Le 75F 75Fb**104. *Idaea camparia* (Herrich-Schäffer, [1852])**Original Reference: Acidalia camparia Herrich-Schäffer, [1852], Syst. Bearb. Schmett. Eur. 6: 65. Type(s): [Türkei]: Smyrna [=Izmir].

Synonym(s): #camparia Herrich-Schäffer, [1851]; camparia Herrich-Schäffer, [1852]; europaea Wehrli, 1934.

Range (as codes): DZ Orn PT ES FR Si IT RO YU HV AL BG GR Cr CY TR LB Bsa Cc AZ Nv AM GG Tbl Kir Lag Ord IQ RU MD UA BY IR Fa Com Kz GlS IL Pa JO TM 01 05 07 16 17 22 30 33 35 45 46 52 59 65 76 05A 16A 33G 46G 46Gi 52G 52Gb 65A 65Ai 65Am 65Am4 76B 76Ba**105. *Idaea degeneraria* (Hübner, [1799])**Original Reference: Geometra degeneraria Hübner, [1799], Samml. eur. Schmett. 5: pl.11, fig.57. Type: Europa.

Synonym(s): degeneraria Hübner, [1799]; degenerata Treitschke, 1828; floridaria Turati, 1913

Range (as codes): MA DZ TN PT ES FR Co Sa Si IT MT GB DE CH AT PL CZ SK HU RO YU AL BG GR Cr Rd CY TR IL Pa LB Bsa Cc AZ GG Tbl Bjo Kir IQ RU MD UA BY IQ TM IR Elb Fa GlS AF KG UZ 01 05 06 07 14 16 17 21 22 27 30 31 33 34 36 39 42 46 48 52 56 58 60 61 65 71 80 01B 01D 01G 01J 05A 16A 21N 21Nh 27D 27Da 30D 30Df 31K 31Ka 31Ka3 33A 33Ak 34R 34Rb 36D 36Db 46G 46Gf 48L 52C 52G 56C 56Cc 56F 56Fa 58N 61K 61Ka 65A 65Am 65An 65Ai 65N 65Nc 65Nc4 65L 65Lb 80B 80Bc**106. *Idaea determinata* (Staudinger, 1876)**Original Reference: Acidalia determinata Staudinger, 1876, [in] Kalchberg, Stettin ent. Ztg. 37(4/6): 141-142. Syntypes: [Italia]: Sicilien.

Synonym(s): determinata Staudinger, 1876; fasciata Staudinger, 1892; geministrigata Fuchs, 1901.

Range (as codes): FR Sa Si IT MT YU MK AL BG GR TR 01 07 13 14 22 31 32 33 39 46 71 01G 01H 01K 13G 13Gg 31M 46G 46Gd

107. *Idaea dimidiata* (Hufnagel, 1767)

Original Reference: Phalaena dimidiata Hufnagel, 1767, Berl. Mag. 4: 602. Type(s): Deutschland: Berlin.

Synonym(s): dimidiata Hufnagel, 1767; scutulata [Denis & Schiffermüller], 1775; antitaurica Wehrli, 1931 nec Wehrli, 1931; tauricola Wehrli, 1934.

Range (as codes): PT ES Mu FR Co Sa Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR Cr TR Cc GG Bjo Kir Lag AZ AM IR Mz IL Pa LB Bsa TM DK NO SE FI EE LV LT RU MD UA Cm BY CA US 01 05 16 31 33 34 39 45 46 48 52 65 75 81 01B 01D 16A 31K 31M 33A 33Ac 48L 52G 52Gb 65D 65Dh 75F 75Fd

108. *Idaea filicata* (Hübner, [1799])

Original Reference: Geometra filicata Hübner, [1799], Samml. eur. Schmett. 5: pl.46, fig.238. Type: Europa. filicata Hübner, [1799];

Synonym(s): filicaria Duponchel, 1830; levequei Leraut, 2005

Range (as codes): ES Mu FR Co Sa Si IT CH AT CZ SK HU RO YU AL BG GR Cr Rd TR IQ Rzw Agh IL Pa CY LB IR 01 05 14 16 17 21 22 30 31 33 34 42 44 45 46 48 52 56 58 59 60 61 65 71 80 01B 01D 01G 01H 05A 05G 16A 21L 21Lc 30D 30Df 33A 33Ad 33Ae 33Ak 33G 44I 44Ic 44L 44Lc 48L 52G 52Gb 56F 58N 60H 60Hb 61K 65A 65Ai 65Am 65Am4 65D 65Dh

109. *Idaea humiliata* (Hufnagel, 1767)

Original Reference: Phalaena humiliata Hufnagel, 1767, Berl. Mag. 4: 614. Type(s): Deutschland: Berlin.

Synonym(s): humiliata Hufnagel, 1767; osseata [Denis & Schiffermüller], 1775; ossearia Hübner, [1799]

Range (as codes): DZ Sbd PT ES Mu FR Co Sa Si IT GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG Mng Smt AM AZ Nv DK NO SE FI EE LV LT RU MD UA Cm BY 05 06 14 16 22 39 65 71 76 05A 16A 65A 65Ai 65F 65Fr 65N 65Np7 65Nm 76D 76Dd

110. *Idaea moniliata* ([Denis & Schiffermüller], 1775)

Original Reference: Geometra moniliata [Denis & Schiffermüller], 1775, Ankündung syst. Werkes Schmett. Wienergegend: 117. Type(s): [Austria]: Vienna district.

Synonym(s): moniliata [Denis & Schiffermüller], 1775; ?pentalineata De Villers, 1789; omicata Fabricius, 1794; #moniliaria Hübner, [1799]; pluripunctata Scharfenberg, 1805

Range (as codes): PT ES FR IT DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc AZ AM GG Tbl Mng Bjo Smt Da Der RU MD UA Cm BY IR Glz TM 01 05 06 13 14 16 22 31 33 34 36 39 42 52 56 60 81 01J 05A 13G 13Gg 16A 31A 33G 36D 36Db 42B 52G 52Gb 56F 56Fq 60G 60H 60Hb

111. *Idaea ochrata* (Scopoli, 1763)

Original Reference: Phalaena ochrata Scopoli, 1763, Entomologia Carniolica: 227. Type(s): Carniola.

Synonym(s): ochrata Scopoli, 1763; #ochreata [Denis & Schiffermüller], 1775; corrigata Fabricius, 1781; ochrearia Schrank, 1802 nec Ross., 1794; sicula Zeller, 1847; accretata Fuchs, 1901

Range (as codes): MA DZ Sbd TN PT ES Mu FR Co Sa Si IT MT GB BE NL DE CH AT PL CZ SK HU RO YU AL BG GR Cr TR Cc GG Tbl Bjo Smt Lag Da Der Kir AZ AM Ksp CY LB DK SE RU MD UA BY IR 01 05 06 14 16 22 25 34 39 46 52 59 65 76 78 81 05A 06R 16A 52G 52Gb 65F 65Fr 65Fp 65Fz 65G 65Gb 65L 65Le 65N 65Np8 65Nm 76C 76D 76Dd 78D 78Da

112. *Idaea ossiculata* (Lederer, 1871)

Original Reference: Acidalia ossiculata Lederer, 1871, Horae Soc. ent. ross. 8: 18-19, pl.2 fig.5.

Syntypes 2♂♀: [Türkei]: Külek.

Synonym(s): ossiculata Lederer, 1871

Range (as codes): MK GR TR Cc AM AZ Nv Ord GG RU Da UA Cm IR Ab Gor Kh LB 01 05 06 07 13 25 30 31 33 38 40 42 44 46 58 65 70 05A 06K 13A 13Ac 13Ax 25F 33H 42B 44L 44Lc 46G 46Gf 58N 65A 65Am 65Am1 65Ai 65At 65At5 65B 65Bo 65Bx 65D 65Df 65L 65Le 65N 65Nc 65Np2 65Nm 70A 70Ab

113. *Idaea politaria* (Hübner, [1799])

Original Reference: Geometra politaria Hübner, [1799], Samml. eur. Schmett. 5: pl.12, fig.61. Type: Europa.

Synonym(s): politata Hübner, 1793 nec Fabr., 1781; politaria Hübner, [1799]; #abmarginata Bohatsch, 1885; mundipennis W. Warren, 1898; abmarginata Staudinger, 1901

Range (as codes): DZ Sbd PT ES FR Co Sa Si IT CH CZ SK HU RO SS YU AL BG GR Cr TR IQ LB Bsa RU MD UA Cm CY Cc GG Lag Der Da AZ AM IR Mz Glz 01 05 07 14 16 22 31 33 34 39 45 52 65 81 01B 01D 01G 05A 16A 31C 33G 52G 52Gb 65L 65Le

114. *Idaea proclivata* (Fuchs, 1902)**(Map 30)**

Original Reference: Acidalia proclivata Fuchs, 1902, Stettin ent. Ztg. 63: 317. Syntypes ♂♀: "Aus dem russischen Armenien".

Synonym(s): proclivata Fuchs, 1902; osthelderi Wehrli, 1932

Range (as codes): AM Cc TR IR Fa Com Kz Sse IL Pa 25 30 46 56 65 30D 30Df 56E 56Eg 65A 65D 65Df 65L 65Le

115. *Idaea rufaria* (Hübner, [1799])

Original Reference: Geometra rufaria Hübner, [1799], Samml. eur. Schmett. 5: pl.21, fig.112. Type: Europa.

Synonym(s): rufaria Hübner, [1799]; ochridana Silbernagel, 1944

Range (as codes): MA PT ES Mu FR Co Si IT BE DE CH AT PL CZ SK HU RO YU B-H MK HV AL BG Vrn GR Rd TR Cc GG Tbl Bjo Ming Kir Bku Smt Da Der Nv Ord AZ AM Ksp IQ RU MD UA BY IR Fa Com Kz Kh AF Pag Kab MN 01 05 14 16 17 22 30 33 34 39 42 58 65 76 80 05A 30D 30De 42B 58N 65A 65Ai 65Am 65At 65At1 65F 65Fg 65Fr 65K 65Kl 65Z 65M 65Md 65N 65Np 65Ns 65Nm 76C 80B 80Bc

116. *Idaea rusticata* ([Denis & Schiffermüller], 1775)

Original Reference: Geometra rusticata [Denis & Schiffermüller], 1775, Ankündung syst. Werkes Schmett. Wienergegend: 113. Type(s): [Austria]: Vienna district.

Synonym(s): rusticata [Denis & Schiffermüller], 1775; mustelata Rambur, 1866.

Range (as codes): DZ FR Co Sa Si IT MT GB BE NL DE CH AT CZ SK HU RO YU AL BG GR Cr TR Cc GG Tbl Bjo Ord Len Der Da AZ AM Nv RU MD UA Cm IL Pa IR Glz Kh AF MN TM KK 05 06 08 13 14 16 22 25 38 39 42 52 56 58 65 75 05A 08H 08Hc 13A 13Ab 13Ax 13G 13Gü 13Gw 13Gy 16A 42B 52G 52Gb 56F 56Fb 56F1 58N 65N 65Np 65Nm 75F 75Fd

117. *Idaea* sp.

Almost blackish species confined to the mountainous areas in SE Turkey. Its DNA barcode has been prepared. Morphological studies are still ongoing.

118. *Idaea sylvestraria* (Hübner, [1799])

Original Reference: Geometra sylvestraria Hübner, [1799], Samml. eur. Schmett. 5: pl.18 figs. 94, 97. Type: Europa.

Synonym(s): sylvestraria Hübner, [1799]; marginepunctata Stephens, 1831 nec Gz., 1781; straminata Treitschke, 1835 nec Bkh., 1794; grammicaria Boisduval, 1840; circellata Guenée, 1858; folognearia Staudinger, 1863; graciliata Mann, 1867; shiskensis Matsumura, 1925; minuta Heydemann, 1933

Range (as codes): ES FR Sa IT GB BE NL DE CH AT PL CZ SK HU RO YU BG TR DK NO SE FI EE LV LT RU MD UA BY Cc GG Sb Sh 48 65 48L 65K 65Kd 65Kg

119. *Idaea trigeminata* (Haworth, [1809])

Original Reference: Phalaena trigeminata Haworth, [1809], Lepid. Br. (2): 354. Type: Britain.

Synonym(s): trigeminata Haworth, [1809]; reversata Treitschke, 1828; reversaria Duponchel, 1830.

Range (as codes): ES Co Sa Si IT GB BE NL DE CH AT CZ SK HU RO YU AL BG GR LB Bsa TR CY GG Bjo Kir AZ SE RU MD UA Cm Cc AM IR Glz 01 05 07 13 14 16 17 30 31 33 34 46 52 61 65 80 81 01G 01J 01H 05A 13F 13F35 16A 30D 30Df 31A 31Ab 31D 31F 31K 31Ka 31Ka5 31L 52G 52Gb 61K 65A 65Ai 65D 65F 65Fr 65L 65Le

120. *Isturgia hopfferaria* (Staudinger, 1879)

Original Reference: Eubolia hopfferaria Staudinger, 1879, Horae Soc. ent. ross. 14: 458-460. Syntypes: [Türkei]: Amasia (Caraman) (Emil & Johann leg.).

Synonym(s): hopfferaria Staudinger, 1879

Range (as codes): TR 05 06 13 14 25 30 38 42 50 65 71 05A 06K 06Kb 13A 30D 30Dp 38H 38Hc 65A 65At 65At5 65Ai 65Ab 65Aba 65D 65Dg 65Ds 65K 65Ky 65Ky1

121. *Isturgia murinaria* ([Denis & Schiffermüller], 1775)

Original Reference: Geometra murinaria [Denis & Schiffermüller], 1775, Ankündung syst. Werkes Schmett. Wienergegend: Type(s): [Austria]: Vienna district.

Synonym(s): murinaria [Denis & Schiffermüller], 1775; nubecularia Villers, 1789; myosaria Esper, [1806]; cineraria Duponchel, 1829; buffonaria Millière, 1855

Range (as codes): PT ES FR Si IT BE DE CH AT PL CZ SK HU RO BG TR AZ AM Cc GG Lag Tbl Bjo RU Ur MD UA BY KK Ik IR Ab Oru CN Ui Tlk Kun 04 13 16 36 56 65 04E 04Ea 13A 13Ab 13Ax 16A 36D 36Db 56F 56F1 65F 65Fp 65Fz 65K 65Kl 65Z 65L 65Lb 65N 65Nm

122. *Larentia clavaria* Haworth, [1809]**(Map 31)**

Original Reference: Geometra clavaria Haworth, [1809], Lepid. Br.: 32. Type: Britain (BMNH).

Synonym(s): clavaria Haworth, [1809]; pallidata Staudinger, 1901

Range (as codes): MA DZ TN PT ES FR Co Sa Si IT MT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU BG GR Cr Rd CY TR IQ LB DK NO SE FI EE LV LT RU Ur At MD UA Cm BY Cc GG AZ AM IL Pa Js IR Ab KG Mn Ssn UZ TJ 14 30 31 46 56 65 30D 31K 31Ka 31Ka5 56F 65A 65Am 65Am4 65D 65Df 65K 65Kl3 65Z

123. *Larerannis marginaria* (Fabricius, 1777)

Original Reference: Phalaena marginaria Fabricius, 1777, Genera Ins.: 286. Type(s): Hamburg.

Synonym(s): marginaria Fabricius, 1777; testacea Retzius, 1783; testacea De Villers, 1789; progemmaria Hübner, [1799]; capreolaria Esper, 1801 nec [Den. & Schiff.], 1775; luctuaria Haworth, 1809; connectaria Haworth, 1809; stictaria Haworth, 1809

Range (as codes): PT ES FR Sa Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU BG TR Cc GG Mng Smt DK NO SE FI EE LV LT RU MD UA BY 06 22 34 39 52 65 75 81 52G 52Gb 75F 75Fb 65D 65Dlc 65L 65Le

124. *Lehmannodes guneyi* (Riemis, 1992)

Original Reference: Aplocera guneyi Riemis, 1992, Phegea 20 (2): 75, figs. Holotype $\hat{\circ}$: Turkey: Bitlis: Kuzgunkırın Geçidi, 2200-2300m (ITZA).

Synonym(s): guneyi Riemis, 1992

Range (as codes): TR IR Kd Bne 13 30 56 65 30B 30Be 30Bj 56F 56Fo 65K 65Kg

125. *Lithostege farinata* (Hufnagel, 1767)

Original Reference: Phalaena farinata Hufnagel, 1767, Berl. Mag. 4: 610. Type(s): Deutschland: Berlin.

Synonym(s): farinata Hufnagel, 1767; illibata [Denis & Schiffermüller], 1775; nivearia Hübner, [1799]; albaria Turton, 1802; bachmutensis L.B. Prout, 1938

Range (as codes): DZ Ght Lbs Bsk TN Gf ES FR IT DE AT PL CZ SK HU RO YU BG GR TR Cc GG AZ Nv DK SE LV LT RU Sb At T-S MD UA Cm BY CN Ui Ku 05 16 34 38 42 47 50 51 56 58 65 05A 16A 47G 56A 58N 65F 65M 65Mc 65Md 65N 65Np 65Ns 65Nm

126. *Lithostege flavigornata* (Zeller, 1847)

Original Reference: Minoa flavigornata Zeller, 1847, Isis 1847: 20. Syntypes: [Türkei]: Makri [=Fethiye].

Synonym(s): flavigornata Zeller, 1847

Range (as codes): TR AM Cc IR Th AZ CN Ui Ku 04 05 06 16 25 38 42 48 58 65 70 76 04C 05A 16A 38H 58N 65M 65Md 76A 76Ac

127. *Lithostege palaestinensis* Amsel, 1935

Original Reference: Lithostege palaestinensis Amsel, 1935, Mitt. zool. Mus. Berlin 20 (2): 276, pl. 14 fig. 9.

Synonym(s): palaestinensis Amsel, 1935; ali Wiltshire, 1941.

Range (as codes): GR CY TR SY Hal IL Pa JO IQ Kbl Fat Njf Agh SA SA63 IR Fa Zj Ss Bu Kz Mz Th Elb Dam 27 31 33 36 44 63 65 27D 27Db 31M 33F 36F 36Fb 44E 44Ei 63B 63Ba 63D 63E 65A 65Am 65Am1 65Am2

128. *Lomaspilis bithynica* Wehrli, 1954

Synonym(s): bithynica Wehrli, 1954

Range (as codes): GR TR Cc AM 06 08 18 25 34 36 38 53 57 60 61 65 75 81 08H 18F 25F 25T 36D 36Db 36Fa 36Fb 60H 60Hb 61K 65F

129. *Lycia hirtaria* (Linnaeus, 1761)

Original Reference: Phalaena hirtaria Linnaeus, 1761, Fauna Suecica: 325, nr. 1236. Type: Sweden.

Synonym(s): #hirtaria Clerck, 1759; hirtaria Linnaeus, 1761; eremita Scopoli, 1763; atomaria Hufnagel, 1767 nec Linn., 1758; hirtipennis Retzius, 1783; congeneraria Hübner, 1799; fumaria Haworth, 1809; hanoviensis Heymons, 1891

Range (as codes): MA PT ES FR Co Sa IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR DK NO SE FI EE LV LT RU MD UA BY 05 16 52 65 76 05A 16A 52G 52Gb 65N 65Nm 65Np 76B 76Bb

130. *Lycia zonaria* ([Denis & Schiffermüller], 1775)

Original Reference: Geometra zonaria [Denis & Schiffermüller], 1775, Ankündung syst. Werkes Schmett. Wienergegend: 100. Type(s): [Austria]: Vienna district.

Synonym(s): zonaria [Denis & Schiffermüller], 1775; zona Fabricius, 1787

Range (as codes): ES FR IE GB BE NL LU DE CH AT PL CZ SK HU RO TR Cc GG Tbl AM DK SE RU MD UA BY 33 65

131. *Lythria cruentaria* (Hufnagel, 1767)

Original Reference: Phalaena cruentaria Hufnagel, 1767, Berlin Mag. 4 (5): 516. Syntypes: Sweden (LSSL).

Synonym(s): purpurata Linnaeus,1761 nec Linn.,1758; cruentaria Hufnagel,1767; rotaria Fabricius,1798; sordidaria Zetterstedt,1839.

Range (as codes): PT ES FR Sa IT BE NL DE AT PL CZ SK RO YU AL BG TR DK NO SE FI LV RU Ur UR MD UA Cm BY IR Ak Shf KG CN Ui Ii Ku o3 o6 13 16 22 34 38 41 42 52 60 71 o6R o6Rb o6Rd 13G 13Gö 16A 52J 52Ja

132. *Lythria purpuraria* (Linnaeus,1758)

Original Reference: Phalaena purpuraria Linnaeus,1758, Syst. Nat. (Edn.10)1: Syntypes: [Europa], Quercus, Prunus spinosa.

Synonym(s): purpuraria Linnaeus,1758; cruentata Hufnagel,1767 nec Sc.,1763; sanguinolenta Fourcroy,1785 nec Linn.,1767

Range (as codes): ES FR IT BE LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG AZ AM IQ IR Gls Kh EE LV RU Ur Sb MD UA BY KG KK TJ TM UZ CN Ui Ii Ku o5 o6 12 13 14 16 17 22 31 33 34 38 39 42 44 46 52 58 60 61 65 69 71 05A 06N 06Na 12E 12Ec 13A 13Ac 13Ac4 13Ax 16A 38H 38Ha 38K 42B 44F 44Fb 52A 58N 60H 60Hb 65K 65Kl 65Z 65N 65Nc

133. *Microloxia herbaria* (Hübner,[1813])

Original Reference: Geometra herbaria Hübner,[1813], Samml. eur. Schmett. 5: pl.79 fig.407. Type(s): Europa.

Synonym(s): herbaria Hübner,[1813]; advolata Eversmann,1837; graminaria Zeller,1849; bruandaria Millière,1860.

Range (as codes): DZ Ges PT ES FR Co Sa Si IT HU RO YU AL BG GR Cr TR GG Lag Kir Ord Len Da Der Cc AZ Nv CY IQ Kbl RU MD UA BY CN Ui Ku IR Fa Com Kz OM IL Pa Hf o1 o5 o6 13 16 17 42 71 o1J 05A 06Y 13A 13Ab 13Ax 16A

134. *Minoa murinata* (Scopoli,1763)

Original Reference: Phalaena murinata Scopoli,1763, Entomologia Carniolica: 229. Type(s): [Slovenien]: Carniola [Krain].

Synonym(s): murinata Scopoli,1763; sordiata Linnaeus,1767; fuscata Hufnagel,1767; euphorbiata [Denis & Schiffermüller],1775; unicolorata Hübner,1787; euphorbiaria Hübner,1799

Range (as codes): DZ Cst PT ES FR Co Si IT GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc AZ GG AM RU Kr Tua MD UA BY CN Ui Kun o5 14 16 17 33 34 39 61 65 05A 16A 61K 65A 65Ai

135. *Nebula* sp.1

Range (as codes): TR 65 65A 65Am 65Am4

136. *Nebula* sp.2

Range (as codes): TR 65 65A 65Am 65Am4

137. *Neognopharmia stevenaria* (Boisduval,1840)

Original Reference: Halia stevenaria Boisduval,1840, Gen. Index Eur. Lepid.: 187.

Synonym(s): stevenaria Boisduval,1840; lapidisaria Freyer,1841

Range (as codes): PT ES Mu FR IT RO MD UA Cm YU HV SS MK AL BG GR Ip Sms Cr TR AZ Cc AM GG IQ IR Fa Sse Com Kz RU Sr Or Ur Vl Kis IL Pa Car Hf LB Bsa CY o1 o5 o6 o8 13 14 16 17 21 22 25 27 30 31 36 42 44 46 56 61 65 o1B o1H 05A 08H 08Ha 13F 13F7 13F71 13G 13Gw 13Gs 13Gy 16A 21N 21Nc 25F 27D 27Db 30B 30Bd 30Bc1 30Bx 30D 30Dx 36D 36Db 42B 44E 44Ei 44Ic 44O 46G 46Gf 56C 56Cc 56F 56Fn 61K 65A 65Ai 65D 65Df 65Dl 65Dlc 65F 65Fp 65Fz

138. *Nychiodes (Eunychiodes) divergaria* (Staudinger,1892)

Original Reference: Nychiodes lividaria var. divergaria Staudinger,1892, Dt. ent. Z., Iris 5: 171. Syntypes: [Türkei]: Mardin, Diarbekir.

Synonym(s): divergaria Staudinger,1892

Range (as codes): TR LB Bei Bsa IL Pa Js RU Da Cc IR Elb IQ Brs Ry Rzw Dia 13 21 24 30 31 44 46 47 65 80 13G 13Gy 31M 46G 46Gi 65A 65Am1 65D 65Df 65Fz 8oB 8oBb

139. *Nychiodes (Eunychiodes) variabila* Brandt,1938

Original Reference: Nychiodes variabila Brandt,1938, Ent. Rdsch. 55: 599, figs.383-386. Holotype ♂: Iran: Fars: Fort Sine-Sefid 2200m 25. Mai 1937, coll.Brandt; Paratype: dto., Fort Mian Kotal, Comée (NRM).

Synonym(s): variabila Brandt,1938; #variabilis auct.

Range (as codes): TR IR Km Ksh Fa Sse Com Mia Kz Ss Kuh IQ Bgd Agh Dk 13 21 23 30 56 65 13G 13Gü 13Gw 21L 21Lc 56F 65F 65Fr

140. *Nychiodes (Fritzwagneria) rayatica* Wiltshire,1957

Original Reference: Nychiodes rayatica Wiltshire,1957, Lepidoptera of Iraq: 111-112, pl.iii fig.10, text-fig.6. Holotype ♂: Iraq: Rayat, Haj Omran (coll. Wiltshire).

Synonym(s): rayatica Wiltshire,1957

Range (as codes): AM Cc IQ Ry Hjo Er IR TR 65 65D

141. *Nychiodes (s.str.) obscuraria* (De Villers,1789)

Original Reference: Phalaena obscuraria De Villers,1789, Linn. ent. 2: 325. Syntypes: [France]: Gallia.

Synonym(s): obscuraria De Villers,1789; obscurata Borkhausen,1794; lividaria Hübner,[1799]

Range (as codes): MA DZ Clo PT FR Si IT CH AT GR TR Cc AZ Len 05 16 17 21 22 33 39 45 65 80 05A 16A 17H 33G 39G 80B 80Bc

142. *Odezia atrata* (Linnaeus,1758)

Original Reference: Phalaena atrata Linnaeus,1758, Syst. Nat. (Edn.10)1: 524. Type(s): Europa.

Synonym(s): atrata Linnaeus,1758; chaerophyllata Linnaeus,1767; chaerophyllaria Boisduval,1840; pyrenaica Gumpenberg,1887; meridionalis Reisser,1935

Range (as codes): PT ES FR Py IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG AM DK NO SE FI EE LV LT RU MD UA BY 01 05 06 13 14 18 28 29 33 36 37 38 42 46 49 60 61 65 71 01L 05A 13G 18F 28N 37F 38K 42B 46B 46F 46Fc 49F 49Fb 61K 65F 65Fg

143. *Opisthograptis luteolata* (Linnaeus,1758)

Original Reference: Phalaena luteolata Linnaeus,1758, Syst. Nat. (Edn.10)1: 525. Type(s): [Europa], in Oxyacanthus.

Synonym(s): luteolata Linnaeus,1758; crataegata Linnaeus,1761; crataegaria Hübner,[1823]; #emaculata Graeser,1892; impunctata Ostheder,1931.

Range (as codes): DZ Anna PT ES FR Co Sa Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG Bjo DK NO SE FI EE LV LT RU MD UA BY LB Bsa CN Ui Ku Kön KK Ik KG Ssn PK Swa Sgl 05 06 08 13 14 16 17 18 34 39 45 52 57 61 65 81 05A 05G 13G 13Gs 13Gw 16A 18F 52A 52G 52Gb 52Gd 61K 65A 65An 65F 65Fr 65L

144. *Orthonama obstipata* (Fabricius,1794)

Original Reference: Phalaena obstipata Fabricius,1794, Ent. Syst. 3 (1): 199. Type: Barbaria.

Synonym(s): obstipata Fabricius,1794; flaviata Hübner,[1799]; gemmata Hübner,1799; albicinctata Haworth,1809; angustata Haworth,1809; querendaria Costa,1850; baccata Guenée,[1858]; lapillata Guenée,[1858]; contrariata Walker,1862; exagitata Walker,1862; intrusata Walker,1862; peracutata Walker,1862; signataria Walker,1863; obruptata Walker,1863; pigrata Walker,1866; plemyrata R.Felder & Rogenhofer,1875; inconspicua Warren,1896; brunneipennis Hulst,1896; discata Warren,1905

Range (as codes): PT ES Mu FR Co Sa Si IT MT IS IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR Cr Rd TR IQ Agh GG AM Cc AZ IR Sse Fa AF DK NO SE FI EE LV RU Ur Sb Am Sh MD UA Cm BY KG KK UZ TJ TM CN MN KP KR JP ZA ZA10 ZA12 Kzu Nta IL Pa Jf Mtl LB Bsa MY Bor Sbh KBa Kh CY PK Swa Dara Sgl Yek YE Tbl Mng Kir Lag Hkd ZR EG ET KE TZ MA DZ Ges Bsk Nbr Gf TN 01 05 06 07 13 14 16 17 22 30 31 33 34 42 46 56 65 71 80 01J 05A 13A 13Ab 13Ax 16A 30D 30Df 31K 31Ka 31Ka3 33G 56F 56Fb 65A 65Am 65Am4 65D 65Dt 65F 65Fp 65Fz 80B 80Bc

145. *Orthostixis calcularia* Lederer,1853

Original Reference: Orthostixis calcularia Lederer,1853, Verh. zool.- bot. Ver. Wien 3: 260-261. Syntypes: [Aserbaidjan]: Elisabethpol; [Türkei]: Amasia.

Synonym(s): calcularia Lederer,1853

Range (as codes): Cc AZ Kir TR 05 12 13 14 42 46 49 65 05A 12A 12Ab 13C 13Cç 46G 46Gf 49E 49Ea 65A 65Ai 65Am 65Am1 65F 65Fb 65Fc 65Fg 65Fp 65Fz

146. *Orthostixis cribalaria* (Hübner, [1799])

Original Reference: Geometra cribalaria Hübner,[1799], Samml. eur. Schmett. 5: pl.16, fig.83. Type: Europa. Synonym(s): cribalaria Hübner,[1799].

Range (as codes): Si IT HU RO YU AL BG GR TR RU Cc GG Bjo Lag Kir Mng Smt AZ AM LB IR Elb Clu 01 05 06 12 13 14 16 17 29 31 33 42 46 56 65 72 75 80 01G 05A 06R 06Rb 12A 12Ab 12E 12Ed 13C 13Cç 13G 13Gü 13Gs 13Gw 16A 31C 33G 42B 46G 46Gf 49E 49Ea 56F 56Fq 65A 65Am 65Am1 65F 65Fb 72E 72Eh 75F 75Fd 80B 80Bb

147. *Oulobophora externaria* (Herrich-Schäffer, [1848])

Original Reference: Lobophora externaria Herrich-Schäffer,[1848], Syst. Bearb. Eur. Schmett. 3: 180. Type ♀: [Turkey: Istanbul Prov.]: "Constantinopel".

Synonym(s): #externata Herrich-Schäffer,1843; externaria Herrich-Schäffer,[1848]

Range (as codes): GR BG CY TR IQ IR Fa Sse IL Pa 05 16 21 30 31 32 33 34 35 42 46 56 65 73 05A 16A 21N 21Nh 30D 30Df 31K 31Ka 31M 33A 33Ac 33Ak 42B 46G 46Gf 56A 56F 65D 65Dy 73A 73Aç 73Aç2 73Ae 73Ak

148. *Ourapteryx malatyensis* Wehrli,1936

Original Reference: Ourapteryx malatyensis Wehrli,1936, Mitt. münchen. ent. Ges. 26 (1): 33-34, pl.2 fig.1. Syntypes 12♂ 2♀: [Türkei]: "Boli, 800m"; Malatya- Tecde.

Synonym(s): malatyensis Wehrli,1936; #malatyana Wehrli,1936 [Tafel II].

Range (as codes): TR 13 14 44 65 13G 13Gy 44L 44Lb 65A 65Ai 65F 65Fp 65Fz

149. *Ourapteryx sambucaria* (Linnaeus,1758)

Original Reference: Phalaena sambucaria Linnaeus,1758, Syst. Nat. (Edn.10)1: 519. Type(s): [Europa], in Sambucus.

Synonym(s): sambucaria Linnaeus,1758.

Range (as codes): PT ES FR Co IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU BG GR TR DK NO SE FI EE LV LT RU MD UA BY 06 13 14 16 45 58 61 06R 06Rb 13G 13Gü 13Gw 16A 58N 61K

150. *Pasiphila rectangulata* (Linnaeus,1758)

Original Reference: Phalaena rectangulata Linnaeus,1758, Syst. Nat. (Edn.10)1: 528. Type(s): Europa.

Synonym(s): rectangulata Linnaeus,1758; viridulata Hufnagel,1767; cydoniata Borkhausen,1794; mediana Panzer,1804; nigrocericeata Haworth,1809; sericeata Haworth,1809; subaerata Hübner,[1817]; rectangularia Boisduval,1840

Range (as codes): PT ES FR Co Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR Cr TR Cc GG Bjo Lag Len AZ IR Gls DK NO SE FI EE LV LT RU MD UA BY 14 22 52 61 65 71 76 52G 52Gb 65F 65Fr 76C

151. *Peribatodes rhomboidarius* ([Denis & Schiffermüller],1775)

Original Reference: Geometra rhomboidaria [Denis & Schiffermüller],1775, Ankündung syst. Werkes Schmett. Wien.: 101. Type: "Wien".

Synonym(s): #rhomboidaria [Denis & Schiffermüller],1775; inaequalis Goeze,1781; gemmaria Brahm,1791; ichnusaria Ghiliani,1852; corsicaria Schawerda,1931; saerdabensis Wehrli,1943

Range (as codes): MA PT ES Mu FR Co Sa Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR Cr TR Cc AZ GG IQ IR Mz Gls Fa Sse DK SE FI RU MD UA BY IL Pa LB Bsa Bmm Zah CY 01 05 08 14 15 16 17 22 30 31 33 34 36 37 42 44 45 46 48 52 56 57 59 60 61 65 77 81 01B 01D 01H 01G 01J 05A 05G 16A 31A 31Ab 31D 31K 31Ka 31Ka3 31L 31M 33A 33Ac 42B 44I 44Ic 46F 46G 46Gf 48L 52C 52G 52Gb 56F 56Fv 60H 60Hb 61K 61Ka 65A 65Am 65Am4 65F 65Fp 65Fz 65N 65Np 65Np5 65Nm

152. *Peribatodes umbrarius* (Hübner,[1809])

Original Reference: Geometra umbraria Hübner,[1809], Samml. eur. Schmett. 5: pl.65, fig.340. Type: Europa.

Synonym(s): umbraria Hübner,[1809]; vaucheri Thierry-Mieg,1916

Range (as codes): MA DZ PT ES Mu FR Co Sa Si IT CH SK HU RO YU AL BG GR Cr TR IQ Brs IR Mz Gls Kh Fa Sse RU MD UA BY IL Pa Js LB Bsa CY 05 12 14 30 31 42 44 45 46 56 65 71 05A 12A 12Ac 31K 31Ka 31Ka5 42B 44I 44Ic 46G 46Gf 46Gi 56F 65A 65An 65Ai 65Am 65Am1 65D 65Dh

153. *Perizoma flavofasciata* (Thunberg,1792)

Original Reference: Phalaena flavofasciata Thunberg,1792, Dissertatio Ent. sistens Insecta Svecica 4: 62. Lectotype 1 ex: [Sweden] (Karsholt & Nielsen,1985: 445)

Synonym(s): flavofasciata Thunberg,1792; decolorata Thunberg,[1799] nec Viller,1789.

Range (as codes): PT ES FR Co IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG TR DK NO SE FI EE LV LT RU MD UA BY 06 16 65 16A 65D 65Df

154. *Perizoma lugdunaria* (Herrich-Schäffer,1855)

Original Reference: Larentia lugdunaria Herrich-Schäffer,1855, Syst. Bearb. Schmett. Eur. 6(68): 139; ibid. 1856: pl.91 fig.565. Syntypes: France (Lyon).

Synonym(s): lugdunaria Herrich-Schäffer,1855

Range (as codes): ES FR IT DE CH AT PL CZ SK HU RO BG LV LT RU UA TR Cc 36 65 73 65A 65Ai 73A 73Ad

155. *Phaiogramma etruscaria* (Zeller,1849)

Original Reference: Geometra etruscaria Zeller,1849, Stettin ent. Ztg. 10 (7): 203. Syntypes 1♂ 3♀: [Italia]: Tuscany (BMNH).

Synonym(s): etruscaria Zeller,1849; pulmentaria Guenée,[1858]; palaestinensis Fuchs,1903

Range (as codes): DZ Clo Anna Bsk TN Gf PT ES Mu FR Co Sa Si IT MT BE CH AT PL CZ SK RO YU AL BG GR Cr Rd TR IQ RU CY SY IR Kd Elb Th Fa Sse Com Kz AZ AM GG Smt Bjo Lag Kir Nv Ord Da Der Cc LB Bsa IL Pa Jf Mtl CN Ui Ii 01 05 14 16 17 21 28 31 32 33 39 42 44 46 52 56 61 65 76 80 01B 01D 01G 01J 05A 16A 21L 21Lc 28N 31K 31Ka 42B 44I 44Ic 44L 44Lc 46G 46Gf 52G 52Gb 56F 61K 65A 65Am 65Am4 65D 65Dg 65F 65Fg 65L 65Le 76A 76Ac 80B 80Bc

156. *Phaselia serrularia* (Eversmann, 1847)

Original Reference: Fidonia serrularia Eversmann, 1847, Bull. Soc. imp. Nat. Moscou 20 (3): 81-82, pl. vi fig. 6. Type $\hat{\ominus}$: [Kazachstan]: "Noor-Saisan".

Synonym(s): serrularia Eversmann, 1847; phaeoleucaria Lederer, 1855.

Range (as codes): RU MD UA BY TR AM Cc AZ KG Mn Ssn Sb At Aa IR Kh 05 25 31 42 46 65 05A 42B 46G 46F 65F 65Fp 65Fz

157. *Phigalia pedaria* (Fabricius, 1787)

Original Reference: Phalaena pedaria Fabricius, 1787, Mant. Ins. 2: 191.

Synonym(s): #pilosaria [Denis & Schiffermüller], 1775; pedaria Fabricius, 1787; hyemaria Borkhausen, 1794; extinctaria Standfuss, 1847.

Range (as codes): ES FR Co Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU BG GR TR DK NO SE FI EE LV LT RU Cc Da Ur MD UA Cm GG AZ AM BY 01 06 13 16 34 56 65 81 01H 06R 56F 65L 65Le

158. *Philereme transversata* (Hufnagel, 1767)

Original Reference: Phalaena transversata Hufnagel, 1767, Berl. Mag. 4: 600-601. Type(s): Germany, Berlin.

Synonym(s): transversata Hufnagel, 1767; rhamnata [Denis & Schiffermüller], 1775.

Range (as codes): ES FR IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG Bjo Mng Smt AZ Kir DK SE FI EE LV LT RU MD UA BY IL Pa IR Mz Gls Kh 01 05 06 16 31 33 38 46 65 71 01J 05A 06R 06Rb 16A 31K 31Ka 31Ka5 65F 65Fr

159. *Proteuchloris neriaria* (Herrich-Schäffer, [1852])

Original Reference: Geometra neriaria Herrich-Schäffer, [1852], Syst. Bearb. Schmett. Eur. 6: 62, fig. 435. Type(s): [Griechenland]: Creta.

Synonym(s): neriaria Herrich-Schäffer, [1852].

Range (as codes): YU BG GR Cr TR Cc GG Smt Bjo IL Pa LB Bsa CY 01 05 13 14 16 17 31 33 46 80 05A 13F 16A 31C 31K 33G 46G 46F 80B 80Bc

160. *Protorhoe corollaria* (Herrich-Schäffer, [1848])

Original Reference: Larentia corollaria Herrich-Schäffer, [1848], Syst. Bearb. Schmett. Eur. 3: 152, fig. 335. Type(s): -.

Synonym(s): corollaria Herrich-Schäffer, [1848]; noacki Draudt, 1935.

Range (as codes): ES FR MK Och AL BG GR Cr Rd TR RU MD UA Cm 01 05 06 07 12 30 31 33 42 46 47 50 51 65 73 05C 06R 06Rb 07B 12E 12Eb 30B 30Bf 31K 31Ka 31M 51B 51Ba 65G 65Ge 73A 73Ab

161. *Protorhoe unicata* (Guenée, [1858])

Original Reference: Melanippe unicata Guenée, [1858], Hist. nat. Spec. gén. lépid. 10, Uran. & Phal. 2: 393-394. Type $\hat{\ominus}$: [Turquie, Amasya Prov.]: "Amasieh" (coll. Lederer).

Synonym(s): unicata Guenée, [1858]; avetiana Vardikyan, 1974

Range (as codes): Si YU MK AL BG GR Sms TR Gk RU IQ Ab Oru IR Fa Shr Sse Com Kz KG KK UZ TJ Fe UA Cm AZ Nv AM Cc GG Lag Kir Ord 01 05 06 07 14 17 18 19 20 21 25 27 30 33 38 42 45 50 56 65 68 70 71 73 80 81 01D 01G 01H 01J 05A 06R 05Re 07L 14I 14Ib 18F 19G 21L 21Lc 25F 27D 27Db 30B 30D 30Da 30Df 330 42B 42O 50G 50Gc 56A 56F 56Fa 65A 65Ai 65Am 65Am1 65F 65Fe 70C 70Cf 73C 73Cd 80B 80Bc

162. *Proutictis artesiaria* ([Denis & Schiffermüller], 1775) (Map 32)

Original Reference: Geometra artesiaria [Denis & Schiffermüller], 1775, Ankündung syst. Werkes Schmett. Wienergegend: 102. Type(s): [Austria]: Vienna district.

Synonym(s): artesiaria [Denis & Schiffermüller], 1775

Range (as codes): PT ES FR IT BE NL DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc AZ Kir SE FI EE LV LT RU MD UA BY IR Fa Com Kz 56 58 60 65 71 56F 60H 60Hb 65F 65Fg 65Fm 65L 65Le

163. *Pseudopanthera syriacata* (Guenée, 1858)

Original Reference: Venilia syriacata Guenée, 1858, [in] Boisduval & Guenée, Hist. nat. Insectes (Spec. gén. Lépid.) 9: 113, pl. 21 fig. 2. Type $\hat{\ominus}$: [Lebanon]: "Beyrouth" (coll. Lederer).

Synonym(s): syriacata Guenée, 1858; #syriacaria Wiltshire, 1958

Range (as codes): TR LB Bsa Bei IL Pa Car Js IQ Dia Ry Rzw Brs 01 13 21 30 31 33 44 46 47 56 65 73 80 01G 01J 13G 13Gö 13Gg 21N 21Nb 21Nc 30B 30Bd 30Bx 31K 31Ka 31M 33A 33Ac 46G 46F 46Gi 56F 65A 65Ai 65An 65Am 65Am1 65Am4 65As 65Au 65D 65Dl 65Dlc 65Dj 65Dr 65Dt 65Du 65Dy 73A 73Aç 73E 73Eb 80B 80Bc

164. *Ramitia kufrana* E. Seven, 2016

(Fig.5, Map 33)

Original Reference: Ramitia kufrana E. Seven, 2016, J. Kansas ent. Soc. 88 (4) (2015): 430-433, figs. Holotype $\hat{\ominus}$: SE Turkey, Siirt Province, Şirvan, Suluyazı 1320m 29 4 2013, leg. & coll. E. Seven.

Synonym(s): kufrana E.Seven,2016

Range (as codes): TR 30 56 65 73 56A 56Ac 56D 56Dd 56F 56Fa 65A 65Ai 73A 73Ad 73Ad2

165. *Rhodometra sacraria* (Linnaeus,1767)

Original Reference: Phalaena sacraria Linnaeus,1767, Syst. Nat. (Edn.12) 1(2): 863. Syntypes: [Algeria]: Barbaria (LSL).

Synonym(s): sacraria Linnaeus,1767; labda Cramer,1777; sacralis Thunberg,1784; fulvaria Fabricius,1794; sanguinaria Esper,1801; minervae Gistl,1856; labdaria Guenée,[1858];

Range (as codes): MA DZ TN PT ES Mu FR Co Sa Si IT MT IE GB BE NL LU DE CH AT CZ SK HU RO YU AL BG GR Cr Rd TR IL Pa Car Jf Js Hf LB Bsa CY IQ Agh TH IR Shr Fa Sse Ahz DK NO SE EE LV RU MD UA BY AF Ca PK Bl Cp Qu ZA ZA04 ZA05 ZA06 ZA27 Kzu Nta Lpo Tva Spb Mdk SH MG MN CN Mre Cp Haz Cls Cn Md Az IN AZ Nv AM Cm SY Hal YE Bea Clo Orn Ges MM ZW TM NA AE CL 01 05 06 07 09 12 13 16 17 22 27 31 33 34 42 44 45 46 48 51 52 56 58 59 63 65 01B 01D 01G 01H 01J 05A 09K 09Ka 12A 12Ai 13A 13Ac 13Ax 16A 31K 31Ka 33A 33Aa 33Ak 33G 33R 44L 44Lc 48L 52G 52Gb 56F 56Fa 56F1 58N 63D 65A 65Ai 65Am2 65Am4 65Am 65D 65Df 65G 65Gb 65Gn 65Go 65F 65Fp 65Fz 65K 65Kl 65Z 65Kr 65N 65Ne 65Np 65Nm

166. *Rhodostrophia (Asiotrophia) auctata* (Staudinger,1879)

Original Reference: Pellonia auctata Staudinger,1879, Horae Soc. ent. ross. 14: 441-443. Syntypes ♂: [Türkei]: Amasia (Maidan). Synonym(s): auctata Staudinger,1879 Range (as codes): TR Cc Arr Ksp IQ IR Fa Com Kz 01 05 06 12 13 24 25 29 38 42 43 44 46 49 50 51 56 57 58 61 62 65 69 70 71 76 01D 05A 06R 06Rd 12A 12Ab 13A 13Ab 13Ac 13Ac2 13Ax 25N 25Na 44E 44Eb 44Ei 44I 44Ic 44L 44Lc 46G 46Gi 50F 50Fb 51D 51Db 56F 56Fs 58N 61K 65A 65Ac 65Ac3 65An 65Am 65Am1 65Bx 65D 65Df 65F 65Fg 65F1 65Fq 65Fz 65G 65Gb 65Ge 65K 65Kl 65L 65Le 65N 65Np 65Np2 65Np4 65Np8 65Nr2 65Nr4 65Nm 76C

167. *Rhodostrophia (Pellonia) vibicaria* (Linnaeus,1761)

Original Reference: Phalaena vibicaria Linnaeus,1761, Fauna Suecica (2): 323. Type(s): Sweden.

Synonym(s): #vibicaria Clerck,1759; vibicaria Linnaeus,1761; cruentata Scopoli,1763; rubrofasciata Hufnagel,1767; artriosa Fourcroy,1785; cruentaria De Villers,1789.

Range (as codes): MA DZ ES Mu FR Si IT BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Arr Cc AM GG Bjo Mng Smt Ord Nv AZ DK NO SE FI EE LV LT RU MD UA BY IR CN Ui Ku KG Sj At 05 13 14 22 25 29 34 38 39 42 52 57 59 60 61 65 69 75 76 81 05A 05G 13A 13Ac 13Ax 13G 13Gw 14E 14Ea 14Eb 14Ec 14H 14Ha 14Hb 14G 14Ga 14B 14Bc 25N 25Na 42B 52F 52J 52Ja 60H 60Hb 61K 65B 65Bx 65F 65Fg 65Fp 65Fz 75F 75Fb 81E

168. *Rhodostrophia (Pydna) badiaria* (Freyer,[1841])

Original Reference: Fidonia badiaria Freyer,[1841], Neuere Beitr. Schmett. 4: 115, Taf.354 fig.2.

Type(s): [Russland]: Sarepta. badiaria Freyer,[1841];

Synonym(s): telaria Herrich-Schäffer,[1847]; cervinaria Herrich-Schäffer,[1847]; praecanaria Eversmann,1847; pollenaria Freyer,1854.

Range (as codes): MK RU Sr UA TR Cc AM Da IR Elb IQ 05 06 14 21 25 29 30 36 38 40 42 44 46 50 51 56 58 65 71 05A 06R 06Rb 14F 14Fb 14G 14Gc 21N 21Nh 36F 40E 40Ea 42B 44E 44Ei 46B 56F 56Fn 58N 58M 65D 65Dh 65Dr 65Drs 65F 65Fw 65G 65Gf 65Gt 65M 65Md 65N 65Np 65Np1 65Np2 65Nr7 65Nm 71C

169. *Rhodostrophia (Pydna) bahara* Brandt,1938

Original Reference: Rhodostrophia bahara Brandt,1938, Ent. Rdsch. 55: 573, figs. 249-251. Syntypes: Iran: Chiraz & Fort Sine-Sefid.

Synonym(s): bahara Brandt,1938

Range (as codes): IR Shr Fa Sse Kd TR AZ Cc IQ SY Dms 12 13 23 24 30 38 46 58 65 12A 12Ab 13A 13Ab 13Ax 13G 13Gü 13Gw 23I 30D 30Df 38K 46G 58M 65A 65Ai 65F 65Fw 65Fz

170. *Rhodostrophia (s.str.) discopunctata* Amsel,1935

Original Reference: Rhodostrophia discopunctata Amsel,1935, Veröff. Dt. Kolon. u. Übersee-Mus. Bremen 1 (2): 243. Lectotype ♂: Israel: Kiriath Anavim nr. Jerusalem (coll. Püngeler, MNU).

Synonym(s): tabidaria auct. nec Zell.,1847; discopunctata Amsel,1935

Range (as codes): RO YU AL MK BG GR IL Pa Car Js Mer LB Bei Bsa JO TR Cc GG AM IQ 05 06 13 14 16 17 18 21 27 28 29 30 31 33 36 38 42 44 46 49 50 56 58 60 65 70 72 80 81 05A 13G 13Gz 14G 14Gb 16A 18F 21N 21Nh 27D 27Da 27Db 28N 30D 30Df 31K 31Ka 31Ka3 31Ka5 36D 36Db 42B 44L 44Lc 46G 46Gf 49F 49Ff 56F 56Fb 56F1 56Ft 58N 60G 65A 65Ai 65An 65Am 65At 65At5 65D 65Dd 65Dda 65Dl 65Dlc 65Dr 65Drb 65F 65Fd 65Fp 65Fz 65Fr 65N 65Np 65Np1 65Np2 65Np5 65Nr6 65Nr7 65Nm 70C 70Ce 72E 72Ei 80B 80Bc 81E

171. *Rhodostrophia (s.str.) sieversi* (Christoph,1882)

Original Reference: Aspilates sieversi Christoph,1882, Horae Soc. ent. ross. 17: 115. Syntypes ♂: [Azerbaidschan: Nachtchivan]: Ordoubad.

Synonym(s): sieversi Christoph,1882

Range (as codes): TR Cc AZ Nv Ord IQ IR Ab Jal Elb Mz 06 30 44 46 65 71 76 44E 44Ei 65D 65Dd 65Dda 65Dc 65Dg 65Ds 65F 65Fp 65Fz 65G 65Gf 65Gg 65Gy 65L 65Le 65N 65Nr3 65Nm 76D 76Dd

172. *Rhodostrophia (s.str.) terrestraria* (Lederer,1869) (Map 34)

Original Reference: Eusarca terrestraria Lederer,1869, Horae Soc. ent. ross. 6: 90, Taf.v fig.9.

Syntypes 2♂: Iran: Astrabad (Gorgan) leg. Haberhauer.

Synonym(s): terrestraria Lederer,1869

Range (as codes): TR TM Kp IR Elb Mz Dam Gor Kh KK Ax 65 65B 65Bo 65Bx 65N 65Np2 65Nm

173. *Rhodostrophia cuprinaria* (Christoph,1876) (Map 35)

Original Reference: Eusarca cuprinaria Christoph,1876, Horae Soc. ent. ross. 12: 261, pl.7 fig.33.

Syntypes ♂♀: [Iran]: Persia: Schahrud.

Synonym(s): cuprinaria Christoph,1876; phaenicearia Hampson,1907.

Range (as codes): TR IR Elb Srd Cc GG Fa Zj AZ Nv Ord AF 13 36 56 65 13A 13Ac 13Ac2 13Ax 13F 13F38 36D 36Db 56F 65A 65Ac 65Ac3 65Aş 65D 65Df 65F 65Fp 65Fz

174. *Scopula beckeraria* (Lederer,1853)

Original Reference: Acidalia beckeraria Lederer,1853, Verh. zool.-bot Ver. Wien 3: 258. Syntypes: [Aserbaidjan]: Elisabethpol [=Kirovabad]; [Russland]: Sarepta.

Synonym(s): beckeraria Lederer,1853; pseudoafghana Ebert,1965

Range (as codes): IT RO SS MK BG GR TR AZ Nv Kir RU Da Sj AZ Nv Ord Der Da Kur GG Cc IL Pa He LB Bsa UZ Fe CN Ui Ku MN IR Fa Sse Com Kz Shr Ahz Ke AF Bm KG MN CN 01 04 05 06 07 13 14 24 25 27 30 36 42 44 47 51 56 58 63 65 71 72 01H 05A 06K 06Kc 06R 06Rd 13A 13Ab 13Ax 42B 44E 44Ei 51B 51Bc 56F 58N 65D 65Df 65F 65Fp 65Fz 65G 65Gb 65Gf 65Gy 65L 65Le 65M 65Md 65N 65Np1 65Nm

175. *Scopula decorata* ([Denis & Schiffermüller],1775)

Original Reference: Geometra decorata [Denis & Schiffermüller],1775, Ankündung syst. Werkes Schmett. Wienergegend: 117. Type(s): [Austria]: Vienna district. Synonym(s): decorata [Denis & Schiffermüller],1775; cinerata Fabricius,1781; violata Thunberg,1784; caerulata Gmelin,1790; decoraria Hübner,[1799]; ornataria Esper,[1806]; armeniaca Thierry-Mieg,1916 Range (as codes): MA DZ Ges TN PT ES Mu FR Co Sa Si IT BE NL DE CH AT PL CZ SK HU RO YU AL BG GR TR GG Bjo Lag Kir Ord Kur Cc AZ Arr Ksp IR Elb Mz DK SE FI EE LV LT RU MD UA BY CN MN KK KG 03 05 06 13 14 16 27 29 30 38 39 42 43 44 45 46 51 58 60 61 65 71 76 80 05A 06B 06R 06Rb 13B 13Bg 13F 13F71 13G 13Gw 16A 27D 27D 38H 38Hc 42B 44L 44Lc 51D 51De 58N 58M 60G 61K 65A 65Ac 65Ac3 65Am 65Am4 65At 65At5 65Ab 65Aba 65B 65Bo 65Bx 65D 65Df 65Dh 65F 65Fp 65Fr 65Fz 65G 65Gf 65Gy 65K 65Kb 65L 65Le 65M 65Md 65N 65Np 65Np2 65Nm 76C

176. *Scopula immistaria* (Herrich-Schäffer, [1852])

Original Reference: Acidalia immistaria Herrich-Schäffer, [1852], Syst. Bearb. Schmett. Eur. 6: 68. Type(s): [Aserbaidjan]: Elisabethpol [=Kirovabad].

Synonym(s): #elisabetharia Heydenreich,1851; immistaria Herrich-Schäffer, [1852]

Range (as codes): BG Vrn TR Cc AZ Kir GG Tbl Bjo Ksp IQ IR Fa Sse Com Ke Kz TM RU UA 06 08 13 23 24 25 30 44 46 47 56 58 65 72 76 08H 13A 13Ab 13Ax 13B 13F 13F71 13G 13Gf 30D 30Df 44E 44Ei 46G 47D 56F 56F5 56Fg 56Fm 56Fq 56Fo 56Fs 56Fv 56Fw 56Fx 56F1 58N 65A 65Ai 65An 65Am 65Am1 65At 65At5 65B 65Bo 65Bx 65D 65Df 65Dg 65Dga 65Dh 65F 65Fm 65Fz 65G 65Gf 65Gy 65H 65K 65Kb 65L 65N 65Np 65Np2 65Nm 72E 72Eh 76C

177. *Scopula immorata* (Linnaeus,1758)

Original Reference: Phalaena immorata Linnaeus,1758, Syst. Nat. (Edn.10): 528. Type(s): Europa.

Synonym(s): immorata Linnaeus,1758; contaminata Scopoli,1763; graminata Hufnagel,1767; festucaria Brahm,1791 nec Hbn.,1790; fuscata Fabricius,1794 nec Hfn.,1767; immoraria Hübner,[1799]; serenata Turati,1905; myrtillata Dadd,1911

Range (as codes): ES FR Si IT GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG TR Cc GG Bjo Kir Bku AZ AM DK NO SE FI EE LV LT RU Sb Am MD UA BY IR Ab 14 16 18 33 65 16A 33G 65F 65Fw 65Fz

178. *Scopula incanata* (Linnaeus,1758)

Original Reference: Phalaena incanata Linnaeus,1758, Syst. Nat. (Edn.10): 528. Type(s): Europa.

Synonym(s): incanata Linnaeus,1758; variegata Scopoli,1763; mediata Fabricius,1777; planata De Villers,1789; incanaria Hübner,[1825]; mutata Treitschke,1828; mutataria Duponchel,1830; adjunctaria Boisduval,1840; demutaria Bruand,1846

Range (as codes): DZ Sbd Clo PT ES Mu FR Si IT BE LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG AM Ksp Arr DK NO SE FI EE LV LT RU MD UA Cm BY IR KG At Sb Ya MN 05 08 16 25 29 30 36 53 61 65 76 05A 16A 61K 65A 65At 65At5 65Aş 65D 65Df 65F 65Fp 65Fw 65Fz

179. *Scopula marginepunctata* (Goeze,1781)

Original Reference: Phalaena marginepunctata Goeze,1781, Ent. Beytr. 3(3): 385.

Synonym(s): marginepunctata Goeze,1781; conjugata Borkhausen,1794; aniculosa Rambur,1829; puellaria Boisduval,1840; mutaria Heydenreich,1851; promutata Guenée,[1858]; promutaria Morris,1861; apertaria Walker,[1863]; madoniata Fuchs,1901; pastoraria Joannis,1891; #marginipunctata Rothschild,1914; britonaria Oberthür,1917; subatrata Wagner,1919; #insubrica Vorbrot,1930

Range (as codes): MA Rf DZ Ges TN PT ES Mu FR Co Sa Si IT MT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR Cr Rd CY TR Cc AM GG Tbl Bjo Kir Ber Ord Nv AZ Nv Arr IQ IR Ab Oru Elb Th Fa DK SE LV LT RU Da MD UA Cm BY CN Ui Ku Ju LB Bsa IL Pa Jf MN 01 05 06 13 14 16 17 21 22 24 30 33 34 35 38 39 42 44 46 52 56 58 59 60 61 65 71 76 80 81 01D 01G 01H 05A 05G 06D 13B 13Ba 16A 21N 21Nh 30D 30Df 33A 33Ae 42B 44E 44Ei 52G 52Gb 56F 56Fg 58N 60H 60Hb 61K 61Ka 65A 65Ai 65Am1 65Am4 65D 65F 65Fm 65Fr 65Fp 65Fz 65L 65Lb 65Le 65N 65Nc 65Np 65Np1 65Nm

180. *Scopula ochraceata* (Staudinger, 1901)

Original Reference: Acidalia rubiginata var. ochraceata Staudinger, 1901, Cat. Lepid. Palaearkt. Faunengeb. 3(1): 273. nr. 3053a. Lectotype $\hat{\circ}$: Russia: Sarepta (MNHU).

Synonym(s): ochraceata Staudinger, 1901

Range (as codes): MK BG GR Cr TR Cc GG AM UA Cm RU Sr 30 65

181. *Scopula orientalis* (Alpheraky, 1876)

Original Reference: Acidalia decorata var. orientalis Alpheraky, 1876, Trudy russk. ent. Obshch. 8: 197. Syntypes: Russia: Taganrog; Lectotype $\hat{\circ}$, designated by Hausmann (2004).

Synonym(s): orientalis Alpheraky, 1876; #magna L.B.Prou, 1913; #orientata Wardikyan, 1970

Range (as codes): MK BG TR RU Ro Ur Tgn Cc AM GG IR Fa Com Kz UA Cm 08 13 25 29 36 50 58 65 08H 08Hb 13A 13Ab 13Ac2 13Ax 25F 36F 50G 50Gd 58N 58Nb 65D 65Df 65F 65Fp 65Fz 65G 65Gb

182. *Scopula ornata* (Scopoli, 1763)

Original Reference: Phalaena ornata Scopoli, 1763, Entomologia Carniolica: 219. Type(s): [Slovenien]: Carniola [Krain].

Synonym(s): ornata Scopoli, 1763; instilata Hufnagel, 1767; paludata Linnaeus, 1767; instituta Rottemburg, 1777; interrupta Goeze, 1781; intersecta Fourcroy, 1785.

Range (as codes): MA DZ Ges Lbs Clo TN PT ES Mu FR Co Sa Si IT MT GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR Cr Rd CY TR Cc GG AZ AM Nv IQ DK SE FI EE LV LT RU MD UA BY CN Ui Kun AF Ca PK Bl Qu Haz Mre 01 05 06 07 09 11 13 14 16 17 18 22 29 30 34 39 44 52 59 61 65 76 77 81 01M 05A 06R 06Rd 13F 13F38 13F7 13F71 13G 13Gs 13Gw 16A 18F 30D 30Df 44E 44Ei 52A 52G 52Gb 61K 65A 65Ai 65Am1 65Am4 65Au 65At 65At5 65D 65Df 65F 65Fd 65Fr 65Fz 65G 65Go 65Gs 65N 65Np1 65Nm 76D

183. *Scopula rubiginata* (Hufnagel, 1767)

Original Reference: Phalaena rubiginata Hufnagel, 1767, Berl. Mag. 3:610. Type(s): Deutschland: Berlin.

Synonym(s): rubiginata Hufnagel, 1767; rubricata [Denis & Schiffermüller], 1775; vittata Thunberg, 1784; domialla Fourcroy, 1785; variata De Villers, 1789; #rubricaria Hübner, [1799]; subangularia Herrich-Schäffer, 1839

Range (as codes): MA PT ES FR Co Si IT GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR GG Tbl Bjo Mng Smt Kir Cc AZ AM DK SE FI EE LV LT RU Sb MD UA BY CN Ui Ku Tek Kty IMn IR Ab MN 05 06 07 13 14 16 24 25 34 39 42 44 52 58 59 65 75 81 05A 06R 06Rd 13B 14B 14Bb 16A 52G 52Gb 58N 65A 65An 65D 65Df 65Fz 75F 75Fd

184. *Scopula submutata* (Treitschke, 1828)

Original Reference: Idaea submutata Treitschke, 1828, Schmett. Eur. 6 (2): 277. Syntypes: Croatia.

Synonym(s): submutata Treitschke, 1828; submutaria Boisduval, 1840; submutulata Rebel, 1902; pseudohonestata Wehrli, 1926

Range (as codes): MA DZ PT ES FR Co Si IT CH RO YU HV MK B-H AL BG GR Cr TR LB Bei Bsa Cc GG AZ Nv IQ Kad IR Glz Kh TM Kp IL Pa 01 05 06 07 13 16 17 21 24 27 30 31 33 42 45 46 47 56 58 65 71 73 01B 01D 01J 05A 13F 13F71 13G 13Gü 13Gw 16A 21L 21Lc 21N 21Nb 27D 27Db 27Dd 30D 30Df 33G 42B 46G 46Ff 56F 56Fh 58N 73E 73Eb

185. *Scopula tessellaria* (Boisduval, 1840)

Original Reference: Strenia tessellaria Boisduval, 1840, Genera index meth. eur. lepid.: 228. Type: "Italia, bor.".

Synonym(s): tessellaria Boisduval, 1840; pulverulentaria Selys-Longchamps, 1844; tabianaria Turati, 1905; proutiana Sheljuzhko, 1955 [ssp.]; guillaumei Leraut, 2005

Range (as codes): ES FR Si IT BE LU RO YU AL BG GR TR Cc GG AM RU MD UA BY CN Ui Kun IR Elb KG Tk 14 25 65 69 25C 25Ca 65F 65Fw 65Fz 69B 69Ba

186. *Scopula transcaspica* L.B.Prou, 1935

Original Reference: Scopula submutata ssp.? transcaspica L.B.Prou, 1935, [in] Seitz, Gross-Schmett. Erde 3 (suppl.): 40 (5a). Syntypes $\hat{\circ}\ddagger$: [Turkmenistan]: Askhabad.

Synonym(s): transcaspica L.B.Prou, 1935

Range (as codes): Cc GG AM AZ Nv TR TM Kp Fyz Ger IR Fa Sse Com Kz Shr Lo AF PK 23 24 29 30 56 58 63 65 71 73 56F 65A 65Ai 65Am 65Am1 65At 65At5 65D 65Df 65Fz 73D 73Df 73E 73Eb

187. *Scotopteryx bipunctaria* ([Denis & Schiffermüller], 1775)

Original Reference: Geometra bipunctaria [Denis & Schiffermüller], 1775, Ankündung syst. Werkes Schmett. Wienergegend: 111. Type(s): [Austria]: Vienna district.

Synonym(s): bipunctaria [Denis & Schiffermüller], 1775; undulata Scopoli, 1763 nec Linn., 1758; geminataria De Villers, 1789; gachtaria Freyer, 1851

Range (as codes): ES FR Si IT GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR GG AM AZ Da Cc LV LT RU MD UA BY 05 06 08 13 14 16 17 29 36 38 53 60 61 69 75 05A 06R 06Rb 06Rd 13Gü 13Gw 14I 14Ib 16A 60H 60Hb 75F

188. *Scotopteryx chenopodiata* (Linnaeus, 1758)

Original Reference: Phalaena chenopodiata Linnaeus, 1758, Syst. Nat. (Edn.10): 1: Type(s): [Europa], in Chenopodium.

Synonym(s): chenopodiata Linnaeus, 1758; limitata Scopoli, 1763; zonata Hufnagel, 1767; olivaceofasciata Retzius, 1783; chenopodiaria Haworth, 1809; mensuraria sensu Duponchel, 1829

Range (as codes): PT ES FR IT MT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG AZ AM DK NO SE FI EE LV LT RU Ur Sb At Ya Am Us Prj Sh Ir Krl Mgd KG MN MD UA Cm BY 05 06 08 14 18 42 36 53 60 61 65 69 75 05A 06R 06Rb 42B 60H 60Hb 65A 65Ai 65B 65Bo 65Bx 65F 65Fp 65Fc 65Fz 65G 65Go 75F 75Fd

189. *Scotopteryx elbursica* (Bytinski-Salz & Brandt, 1937) (Map 36)

Original Reference: Ortholitha elbursica Bytinski-Salz & Brandt, 1937, Entomologist's Rec. J. Var. 49: 12-13. Holotype ♀: Iran: Nissa.

Synonym(s): elbursica Bytinski-Salz & Brandt, 1937

Range (as codes): IR Elb Nss Th IQ Cc AM AZ TR 65 65L 65Le 65N 65Np 65Nm

Remarks: The image in the nature published by Koçak & Kemal (2014: fig.80) from Gören Mt. belongs to this species.

190. *Scotopteryx kuznetzovi* (Vardikjan, 1957) (Map 37)

Original Reference: Ortholitha kuznetzovi Vardikjan, 1957, Dokl. Akad. Nauk. ArmSSR 25: 281. Holotype ♂: Armenia, Eriwan (ZIASA).

Synonym(s): kuznetzovi Vardikjan, 1957

Range (as codes): Cc Eri AM GG Tbl TR IR Ak Ab Es 04 13 65 04C 13B 65Bx 65G 65Ge 65N 65Nc 65K 65Kl 65Kl2 65Kl3 65Z

191. *Scotopteryx nebulata* (A.Bang-Haas, 1907)

Original Reference: Ortholitha nebulata A.Bang-Haas, 1907, Dt. ent. Z., Iris 20: 82-83, Taf.iii fig.4. Type 1♂: [Türkei: Gaziantep]: "Aintab (Klein-Asien)".

Synonym(s): nebulata A.Bang-Haas, 1907

Range (as codes): TR 27 51 62 65 51B 51Ba 62E 65A 65Ab 65Aba

192. *Scotopteryx subvicinaria* (Staudinger, 1892)

Original Reference: Ortholitha subvicinaria Staudinger, 1892, Dt. ent. Z., Iris 5: 211. Syntypes ♂♀: "Caucasus, 1868" (ex coll. Lederer).

Synonym(s): subvicinaria Staudinger, 1892

Range (as codes): BG Pi LB Cc GG AZ AM TR IR 13 25 49 65 13G 13Gö 13Gğ 13Gü 13Gs 13Gw 49F 49Fb 65A 65Abc 65Aş 65Ai 65D 65Df 65L 65Le

193. *Scotopteryx vicinaria* (Duponchel, 1830)

Original Reference: Eubolia vicinaria Duponchel, 1830, [in] Godart & Duponchel, Hist. nat. lépid. Papillons Fr. 8 81): 188, pl.182 fig.4. Syntypes ♀♀: France, Digne.

Synonym(s): vicinaria Duponchel, 1830; zumsteinaria Harpe, 1862; illyriacaria Schawerda, 1919; roesleri Vojnits, 1973

Range (as codes): FR IT CH RO YU HV BG Sof GR TR Cc GG AZ AM MD UA BY LB IR Elb Th KG Ssn 05 06 31 37 46 56 65 05A 06R 06Rb 46G 46Gi 56F 65A 65Am 65Am4 65Ac 65D 65F 65Fz

194. *Selenia lunularia* (Hübner, 1788)

Original Reference: Phalaena lunularia Hübner, 1788, Beitr. Gesch. Schmett. 1 (3): 27, pl. 3 figs. T,1,2. Syntypes ♂♀: [Germany], Augsburg.

Synonym(s): lunaria [Denis & Schiffermüller], 1775 nec Fabr., 1775; lunularia Hübner, 1788; delunaria Hübner, [1799]; sublunaria Stephens, 1831

Range (as codes): MA Ifr TN PT ES FR Co Si IT IE GB BE NL LU DE CH AT CZ SK HU RO YU AL BG GR TR DK NO SE FI EE LV LT RU MD UA BY Cc GG Bjo Mng Smt IR Gls CN Ui Ku 01 05 13 14 17 34 52 55 57 61 65 75 80 81 01G 05A 13G 13Gw 13Gs 52G 52Gb 55F 61K 61Kc 65A 65Ai 65An 65F 65Fg 65Fr 65L 65Le 65N 65Np6 65Nm 75F 75Fb

195. *Selidosema plumarium* ([Denis & Schiffermüller], 1775)

Original Reference: Geometra plumaria [Denis & Schiffermüller], 1775, Ankündung syst. Werkes Schmett. Wienergegend: 106. Type(s): [Austria]: Vienna district.

Synonym(s): #plumaria [Denis & Schiffermüller], 1775; limbata Rambur, 1829.

Range (as codes): ES Si IT CH AT CZ SK HU RO YU AL GR TR FI EE RU MD UA BY IR Kh 05 14 46 56 58 65 70 81 05A 14I 14Ib 56F 56Fz 58G 58Gg 65A 65Am 65Am4 65D 65Df 65F 65Fp 65Fz 70C 70Cb

196. *Siona lineata* (Scopoli, 1763)**(Map 38)**

Original Reference: Phalaena lineata Scopoli, 1763, Entomologia Carniolica: 218. Type(s): [Slovenien]: Carniola [Krain].

Synonym(s): lineata Scopoli, 1763; dealbata Linnaeus, 1767; duplicata Fourcroy, 1785 nec Fabr., 1775; dealbaria Hübner, [1799]

Range (as codes): ES AD FR Co Si IT GB BE NL LU DE CH AT PL CZ SK HU RO SS YU B-H MK AL BG GR TR Cc GG Tbl Bjo AM Dar AZ DK NO SE FI EE LV LT RU Sb Am Us MD UA BY KG TrA Aa CN Ui Ii Ku 05 13 16 18 22 39 60 65 75 05A 13G 13Gö 13Gw 13F 16A 18F 60H 60Hb 65A 65An 65Aö 65Ai 65Au 65Am 65Am1 65F 65Fr 75F 75Fb

197. *Stamnodes depeculata* (Lederer, 1870)**(Map 39)**

Original Reference: Cidaria depeculata Lederer, 1870, Annls Soc. ent. Belg. 13: 40, 50-51, pl. 2 fig. 6.

Syntypes: [Georgia]: Transcaucasia.

Synonym(s): depeculata Lederer, 1870

Range (as codes): GR Prn TR Cc GG Da RU Kc Teb Kb IR Lo AZ CN Ts Kno Sz T-T Ti IR Elb Kdv Nss Vdb Dam Mz 25 65 69 76 25C 25Ca 65A 65Ab 65Aba 65F 65Fw 65Fz 69B 69Ba 76C

198. *Stegania dilectaria* (Hübner, 1790)

Original Reference: Phalaena dilectaria Hübner, 1790, Beitr. Gesch. Schmett. 2(3): 76, Taf. 4 fig. W.

Synonym(s): dilectaria Hübner, 1790; commutataria Hübner, [1819]; commutata Freyer, [1832]

Range (as codes):

DE AT CZ SK HU RO YU BG GR TR Cc AZ RU MD UA BY CN Ui Ju 01 13 14 22 34 42 44 46 55 56 60 65 71 81 01B 01D 01H 01J 13F 13F7 13F71 42B 44E 44Eh 55F 56F 60H 60Hb 65A 65An 65Ai 65F 65Fg

199. *Stueningia wolfi* Hausmann, 1993**(Map 40)**

Original Reference: Stueningia wolfi Hausmann, 1993, Bonn. zool. Beitr. 44 (3/4): 230-232, Abb. 1.

Holotype $\hat{\sigma}$: Türkei: S. Anatolien, Karapinar, 995m, 12.vi.69, leg. G. Friedel (ZSM).

Synonym(s): wolfi Hausmann, 1993

Range (as codes): TR 01 07 33 42 65 72 01H 01J 07A 07C 33P 42J 42O 65D 65Dx

200. *Synopsia sociaria* (Hübner, [1799])

Original Reference: Geometra sociaria Hübner, [1799], Samml. eur. Schmett. 5: pl. 29, fig. 155. Type: Europa.

Synonym(s): sociaria Hübner, [1799]; staudingeraria Martorell, 1874; acuta Wehrli, 1926

Range (as codes): PT ES FR Co Sa Si IT NL DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG Lag AZ Len AM Eri IR Glz RU Ur At MD UA BY CN Ui Ku 14 16 17 25 33 34 42 52 65 16A 42B 33G 52G 52Gb 65A 65An

201. *Synopsidia phasidaria* (Rogenhofer, 1873)**(Fig. 6, Map 41)**

Original Reference: Nychiodes phasidaria Rogenhofer, 1873, Verh. zool.- bot. Ges. Wien 23 (Abh.): 572. Type $\hat{\varphi}$: [Georgia]: "Im sommer bei Achalzik".

Synonym(s): phasidaria Rogenhofer, 1873

Range (as codes): Cc GG Smt Akh AF Kab IR Ha Avd Es Fa Com Kz Shr Elb Th Dam Kh TM Noc AZ Nv Ord TR 13 30 65 73 13G 13Gs 13Gw 65F 65Fç 65Fz 73A 73Ad 73Ad2

202. *Thalera fimbrialis* (Scopoli, 1763)

Original Reference: Phalaena fimbrialis Scopoli, 1763, Entomologia Carniolica: 216. Type(s): [Slovenien]: Carniola [Krain].

Synonym(s): fimbrialis Scopoli, 1763; thymiaria Linnaeus, 1767; bupleuraria [Denis & Schiffermüller], 1775; albaria Esper, [1801]; magnata Fuchs, 1903; obsoleta Skala, 1913; major Warnecke, 1930; ochracea Kolossow, 1936; approximata Lempke, 1949; tangens Lempke, 1949; fasciata Hartwieg, 1951

Range (as codes): PT ES FR Co Si IT GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR AZ AM GG Lag Kir Hkd Cc DK NO SE FI EE LV LT RU MD UA BY KK Iк Ax CN Ui Kun Au IR Elb Th Fa Com Kz 05 13 16 17 22 30 31 33 34 41 42 46 51 56 58 62 65 75 81 05A 13A 13Ab 13Ax 13D 13G 13Gy 16A 30D 30Df 31K 31Ka 31Ka5 42B 56F 58N 65A 65Ai 65Am 65Am1 65B 65Bo 65Bx 65D 65Dç 65Dç1 65Df 65F 65Fd 65Fg 65Fz 65L 65Le 65N 65Nr2 65Nm

203. *Thetidia persica* Hausmann, 1996

Original Reference: Thetidia (Antonechloris) persica Hausmann, 1996, Nota lepid. 19 (1/2): 27-29, figs. Holotype ♀: Iran: Elburs mts.c.s., Tacht i Suleiman, Sardab Tal (Vandarbad), 2500-2700m, leg. Pfeiffer & Forster (ZSM).

Synonym(s): persica Hausmann, 1996

Range (as codes): IR Elb Mz Ak Ab TR 13 30 46 58 65 13A 13Ab 13Ax 13G 13Gü 13Gw 30B 30Bd 30Bc1 30Bx 30D 30Df 65A 65Am 65Am1 65B 65Bo 65Bx 65D 65Df 65Dh 65Dg 65Dga 65F 65Fg 65Fp 65Fz 65G 65Gf 65Gy 65L 65Le 65N 65Np 65Nm

204. *Thetidia smaragdaria* (Fabricius, 1787)

Original Reference: Phalaena smaragdaria Fabricius, 1787, Mant. Ins. 2: 192, nr.67. Type (s): Austria.

Synonym(s): smaragdaria Fabricius, 1787

Range (as codes): ES FR Si IT GB BE LU DE CH AT PL CZ SK HU RO YU AL BG GR TR GG Smt Bjo Lag AZ AM Cc IR NO FI EE LV LT RU MD UA BY KK Ax Ik CN Ui Ku Ju Tlk 05 06 16 36 42 65 71 05A 16A 36D 36Db 42B 65D 65Dl 65Dlc

205. *Triphosa dubitata* (Linnaeus, 1758)

Original Reference: Phalaena dubitata Linnaeus, 1758, Syst. Nat. (Edn.10)1: 524. Type(s): Europa.

Synonym(s): dubitata Linnaeus, 1758

Range (as codes): ES FR Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR TR Cc GG Mng Bjo Smt AZ Lag Kir DK NO SE FI EE LV LT RU MD UA BY 58 65 58N

206. *Xanthorhoe fluctuata* (Linnaeus, 1758)**(Map 42)**

Original Reference: Phalaena fluctuata Linnaeus, 1758, Syst. Nat. (Edn.10)1: 527. Type(s): [Europa].

Synonym(s): fluctuata Linnaeus, 1758; fibulata Hufnagel, 1767; cinerata Fourcroy, 1785 nec Fabr., 1781; costovata Haworth, 1809; fluctuaria Boisduval, 1840; multistriga Oberthür, 1910

Range (as codes): MA DZ Clo Cst TN ES Mu FR Co Si IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR Cr Rd CY TR Cc GG AM AZ IQ IR Fa DK NO SE FI EE LV LT RU Kol K-R Sb Am Kmt Sh MD UA Cm BY IL Pa Jf LB Bsa KK KG CN Ui Kön KP KR JP 01 05 06 14 16 17 21 22 31 33 34 39 42 46 48 49 51 52 56 58 65 73 01G 05A 16A 21N 21Nh 31D 31K 31Ka 33A 33Ac 33Ak 42B 48L 49F 49Fb 52G 52Gb 56F 58N 65A 65Am 65Ai 65Fr 65Fu 73A 73Ac 73E 73Eb

207. *Xanthorhoe inconsiderata* (Staudinger, 1892)

Original Reference: Cidaria inconsiderata Staudinger, 1892, Dt. ent. Z., Iris 5: 226. Syntypes 2♂: [Türkei]: Amasia.

Synonym(s): inconsiderata Staudinger, 1892

Range (as codes): TR 05 46 56 65 05A 56F 56Fc

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Appendix

Some necessary information about our latest publication on the *Gnophini*

Our colleagues from abroad, which are in close contact with us, know how helpful and democratic we are. Those who have a negative prejudice against us, cannot understand that the works we aim are purely scientific, under very difficult conditions.

We never wanted to write the text below, but these explanations and inquiries became necessary, as we received a message several days ago, containing non scientific, but heavy, subjective, and unwarranted accusations about our last publication on the *Gnophini* of Turkey. Constructive criticisms are always welcomed. But, the statements of the present message should not have been provocative and insulting in style, if it was a scientific note.

Our all the material collected by us from Turkey (own country) are legal. In other words, our all publications on the Lepidoptera and also other insect groups of Turkey are based upon the legal material. As to the material from Turkey that mentioned in the Bold Systems, the legitimacy of such material is highly doubtful. It is very well known in Turkey, also in Europe, that especially foreign collectors collect all kind of insects, as well as other biological material from Turkey mostly without legal permit, and export them by illegal means. Such materials are currently stored in some European museums or in other institutions. The biological museums in abroad can be now divided into two groups; (1) reputable institutions, depositing only legal material; (2) other institutions, depositing also illegal material. How should they be named; we don't know. Of course, administrators of the museums must be very meticulous and act responsibly in this regard, in order to protect the reputation of their institutions. Similarly, even if it is scientific data, the information placed in the Bold Systems based upon the illegal material, damages very much the institution's legality.

Now, we explain our opinions about some lines from the e-mail message sent to us:

"I am very disappointed with your latest "publication" on Turkish Gnophini. It is incredible for me and my colleagues that you simply used our DNA barcode data without prior request."

Yes, we used limited some DNA barcode data from Bold Systems, in order to understand the molecular values of our legal material. We used only "publicly available" information and cited appropriately the Bold Systems for this purpose. "our DNA barcode data without prior request" demand seems meaningless; because all the data that we used have been selected among the list that "publicly available". We understand with this expression "publicly available" that the information is available for everybody, not for some privileged people.

"You also may be surprised to hear that many of our species names in BOLD are just working hypotheses."

We consider that the Bold Systems is reputable and reliable. This expression, mentioned above, can make a different meaning. Namely, the scientific names used in the Bold Systems are not reliable. Is the media of Bold Systems, a place for "just working hypotheses"? This scientific-looking statement "working hypotheses" means in fact "scribble notes, when thinking". Can Bold System be used like a scribbling pad? If so, why such carelessly produced statements are "publicly available"? Inevitably this case causes the reader to be misinformed. Responsibility belongs to the person, who created this situation.

"That's why, your "PDF" contains so many mistakes and speculations"

In our publication, there are two kind faunistic information that based upon the identified specimens. We checked again the identifications made by ourselves based upon our material; they are all correct. Therefore, we confirm here our identifications. However, if our publication contains still "so many mistakes"; then it needs to be seriously asked, whether the information in the Bold Systems correct, or not.

"It is also very regrettable that you have important information, e.g. about the origin of the "C.mutilata" you are using, which you do not provide. I am really sorry, but such an approach does not meet scientific standards at all."

We are always in favour of the necessity of free thinking, and supporting free thinking young scientists. Free thought, even if against, is always necessary for development. Ideas or approaches may also be inaccurate. The knowledged people should be helpful in correcting the mistakes of young people, or of the people that needs help. Yes, we used *mutilata* information in our paper but unfortunately we didnot demand its type from the curator who can perhaps do this. We were in hesitation in this point. One of the reason among the others is so: To our previously sent a scientific e-mail message, we could receive a reluctant response from a curator after 168 days. Is this a standard waiting period? Such as an extreme unwillingness does not fit into collegiality. The stated reason was being very busy. We are all extremely busy. Therefore, this cause doesnot reflect the truth. Now, does this colleague have the right to speak about other scientific standards?

In conclusion, the situation arises is extremely annoying. It is probable that some people carry also same idea. Therefore, the development of inter-communal understanding and cooperation depends strongly to the level of tolerance, we can show each other. The tolerance, what we meant here, is based upon the equal collaboration, and respectful approach of the rights of native researchers. Imperialist understanding and creating subject domination in certain areas must be removed from the mind.

Selected images from nature



Figs. 1, 2 – *Charissa certhiata*. Van Pr. Gevaş, Artos Mt. 1980m, 17.viii.2015 (left); *Charissa aff. mutilata*. Malatya Prov. Beydağı NP 1190m, 27.iv.2015, M. Kemal (Cesa).

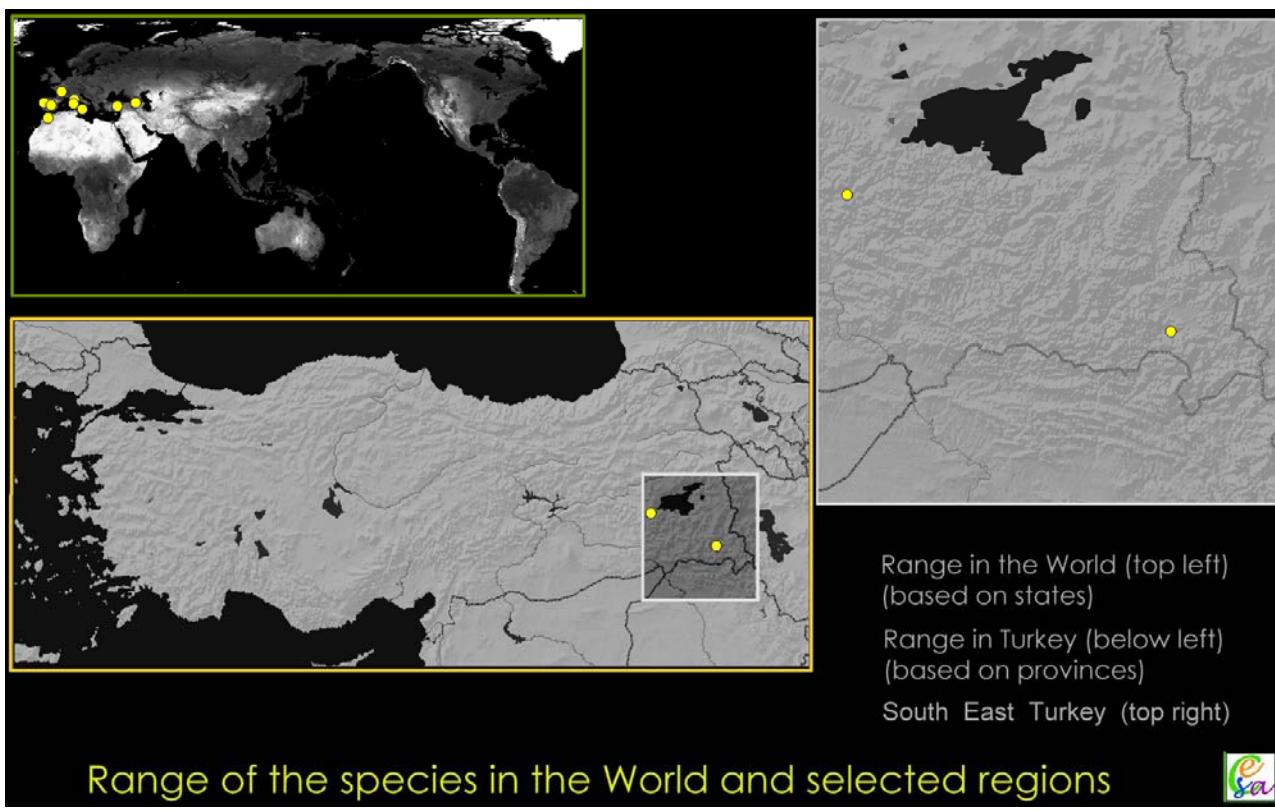


Figs. 3, 4 – *Charissa onustaria*. Siirt Prov., Şirvan, Maden Pass 1350m, 20.iv.2015 (left); *Docirava mundata*. Van Prov., Tuşba, Gören Mt. Ağarti 1950m, 5.ix.2015, M. Kemal (Cesa)

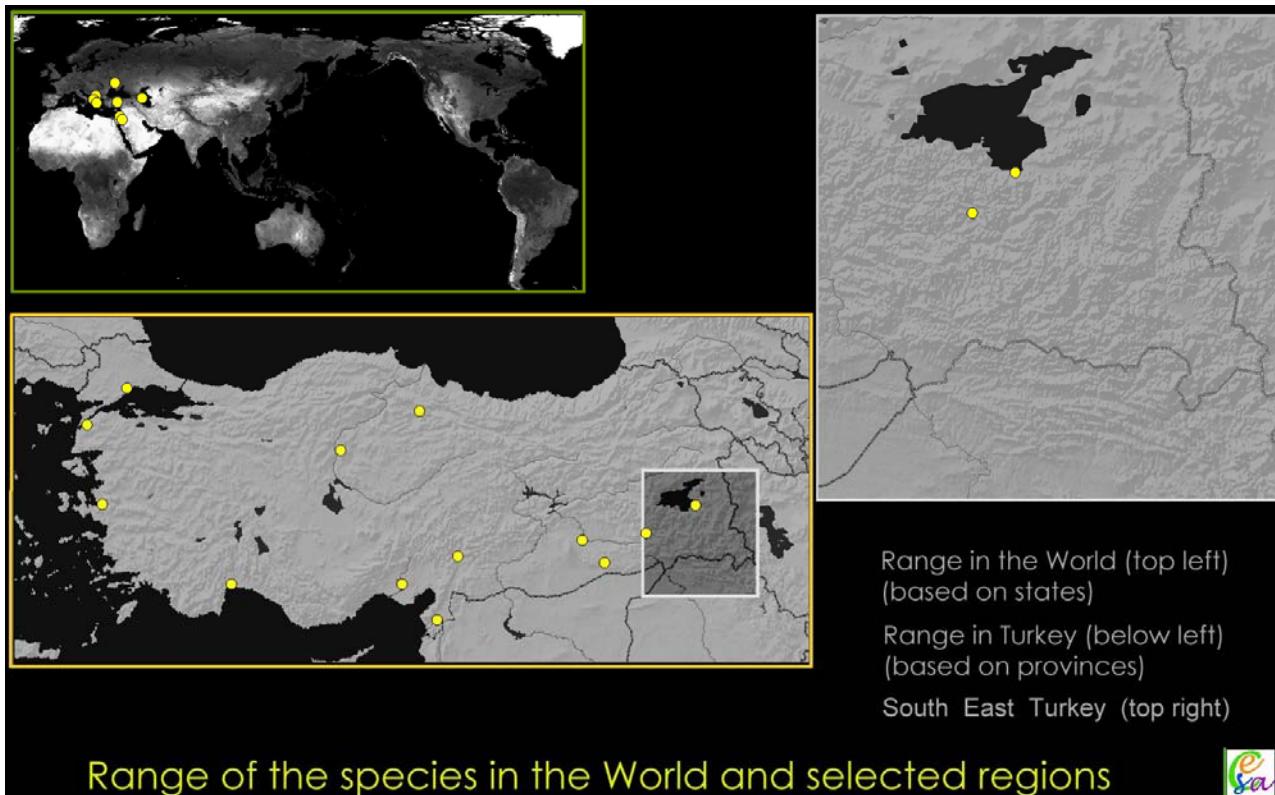


Figs. 5, 6 - *Ramitia kufrana*. Siirt Prov., Şirvan, Maden Pass 1350m, 20.iv.2015 (left); *Synopsidia phasidaria*. Van Prov. Gevaş, Artos Mt. 1980m, 21.vi.2012, M. Kemal (Cesa)

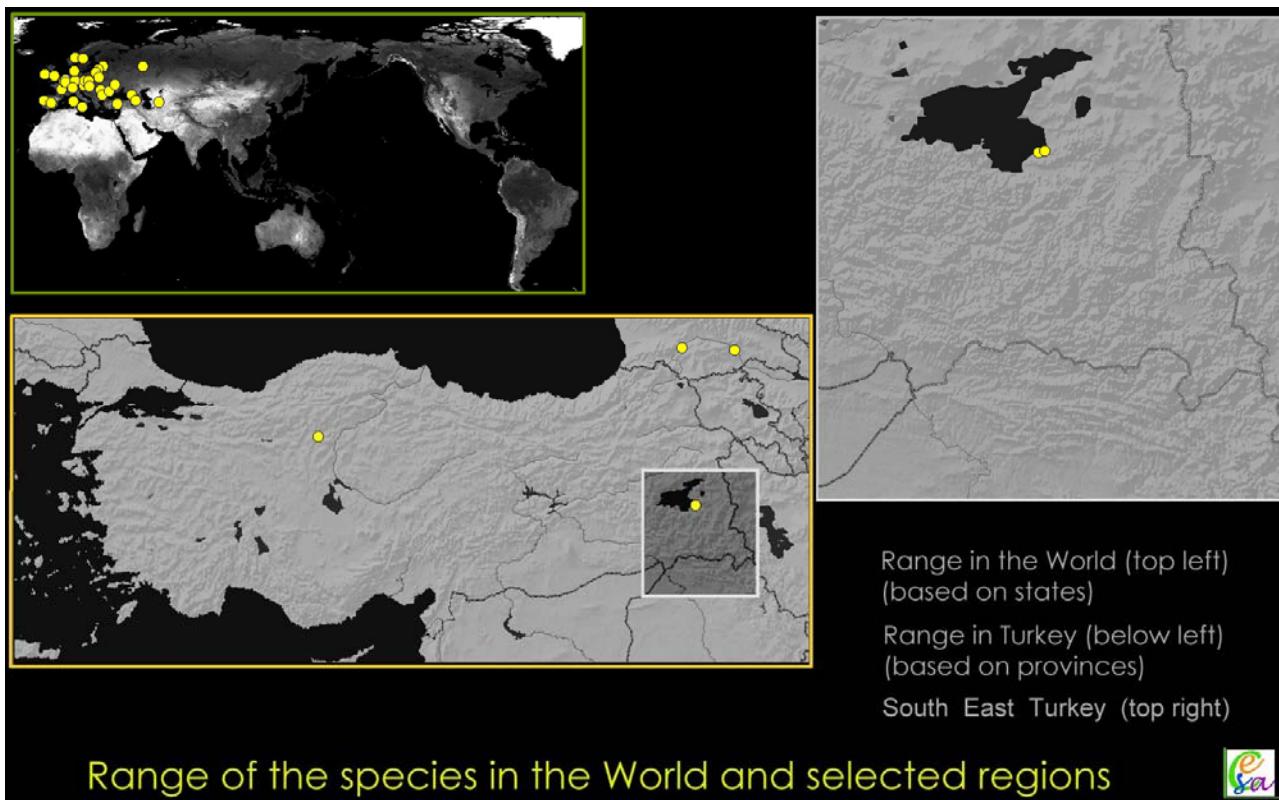
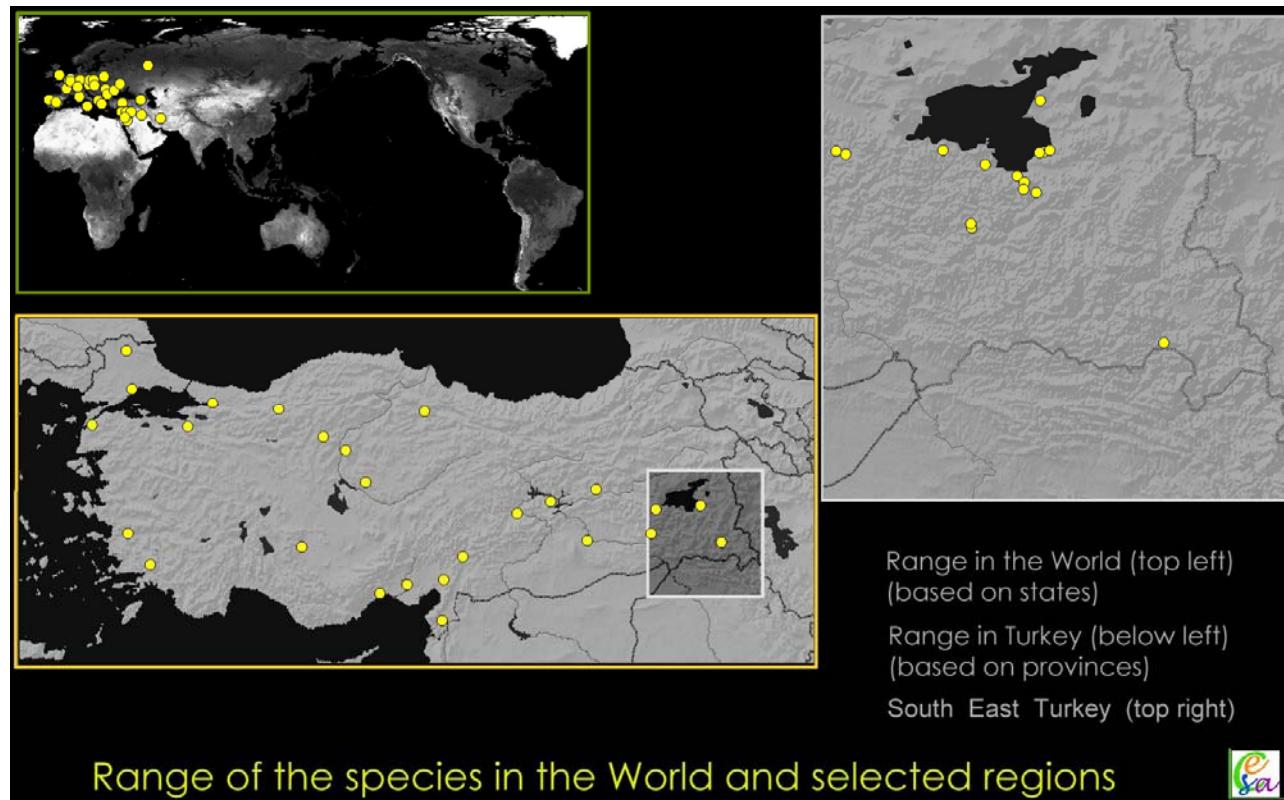
Maps

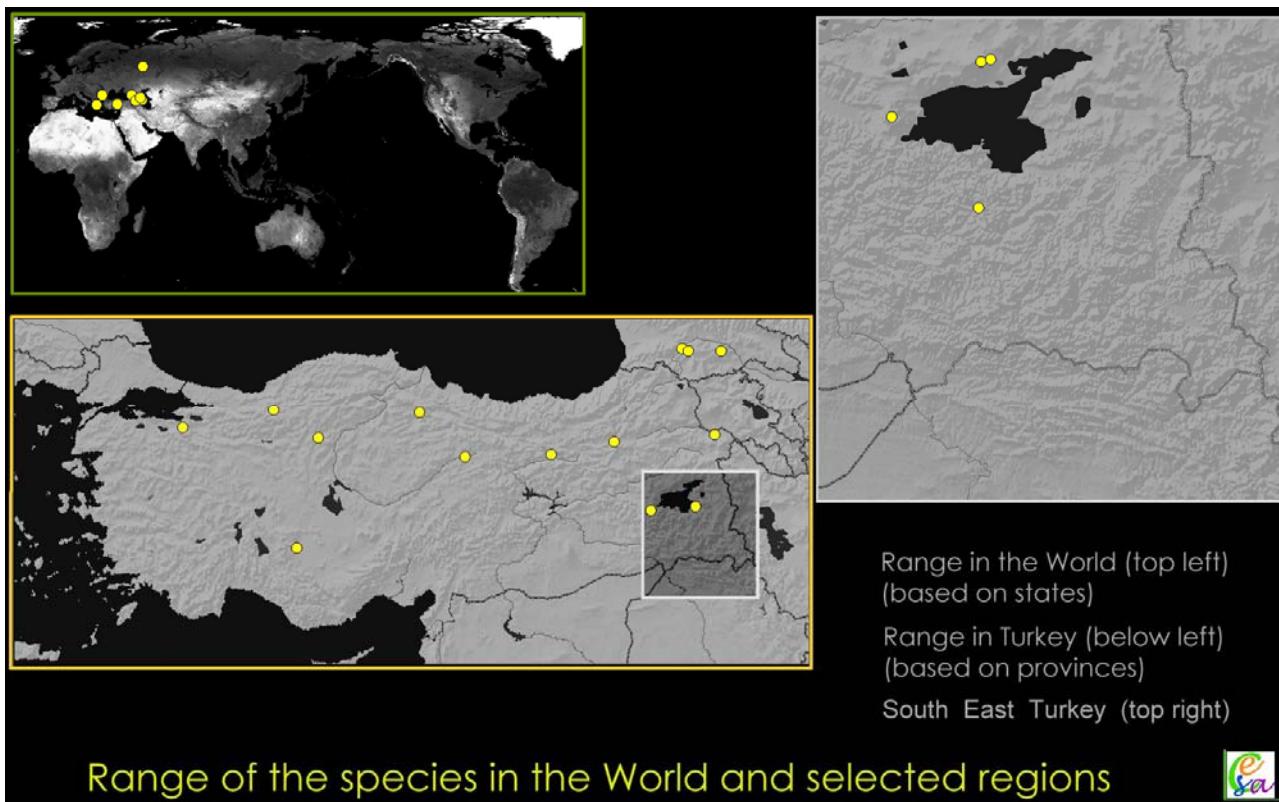
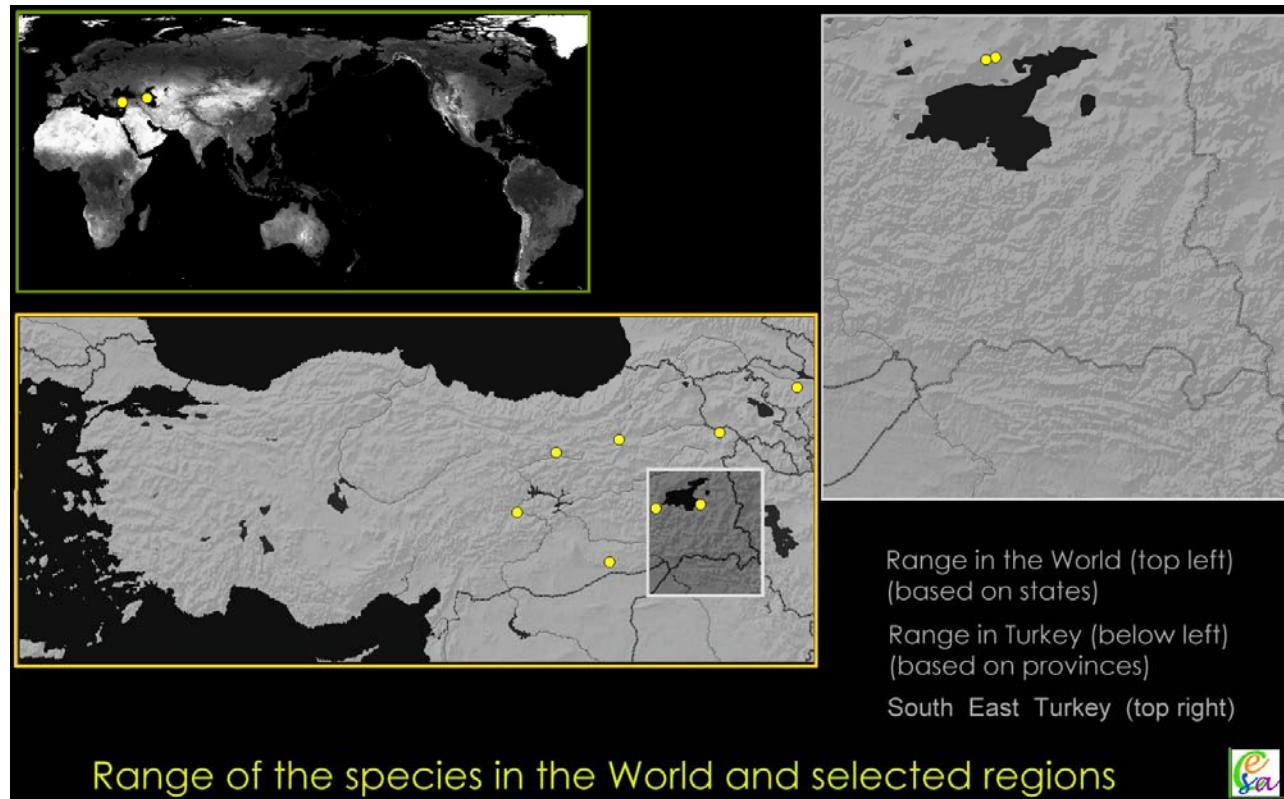


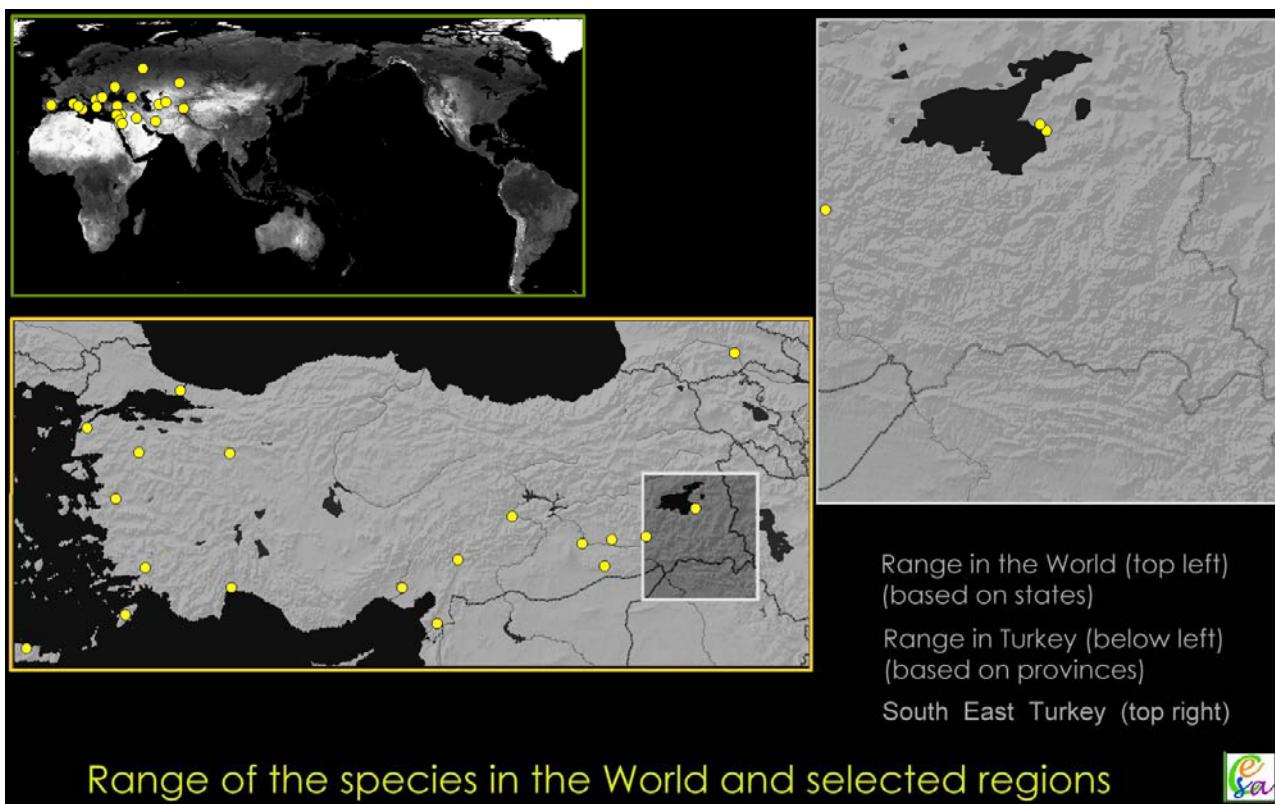
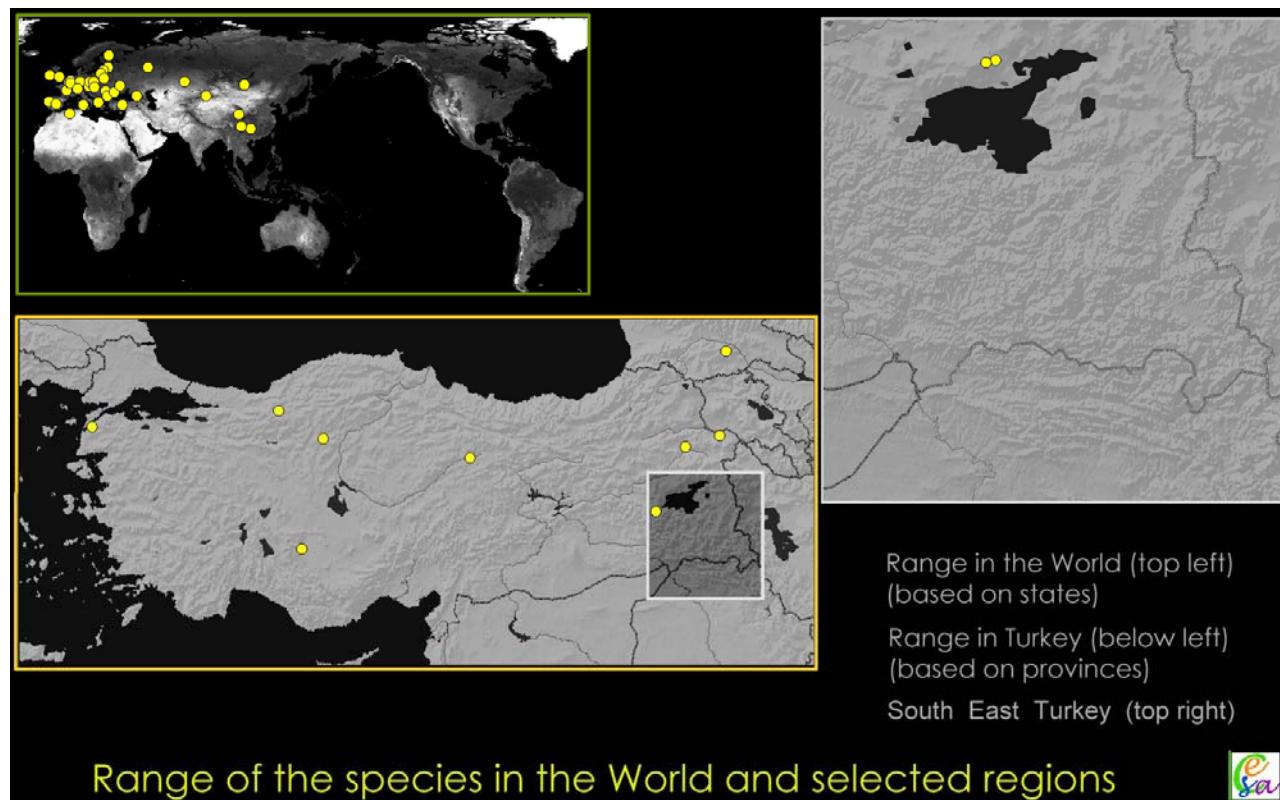
Map 1 - *Abraxas (Calospilos) pantaria*.

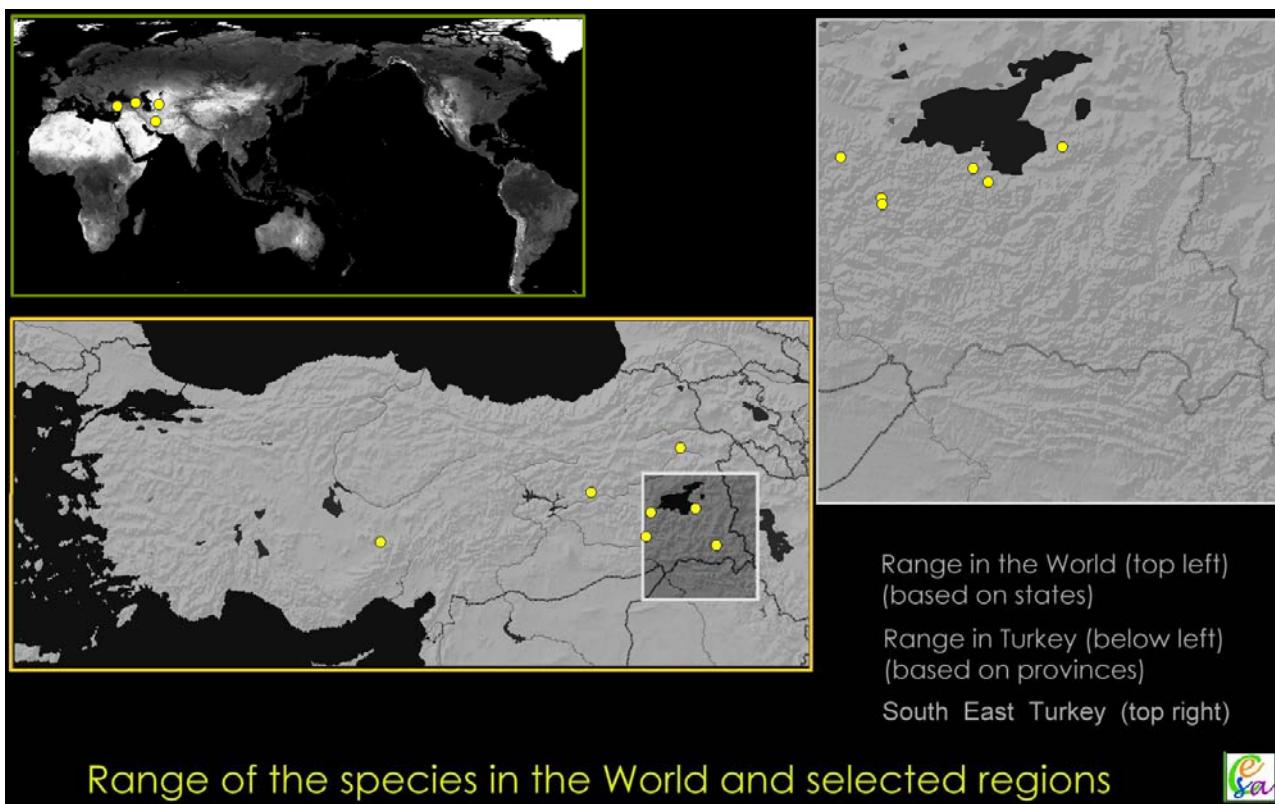
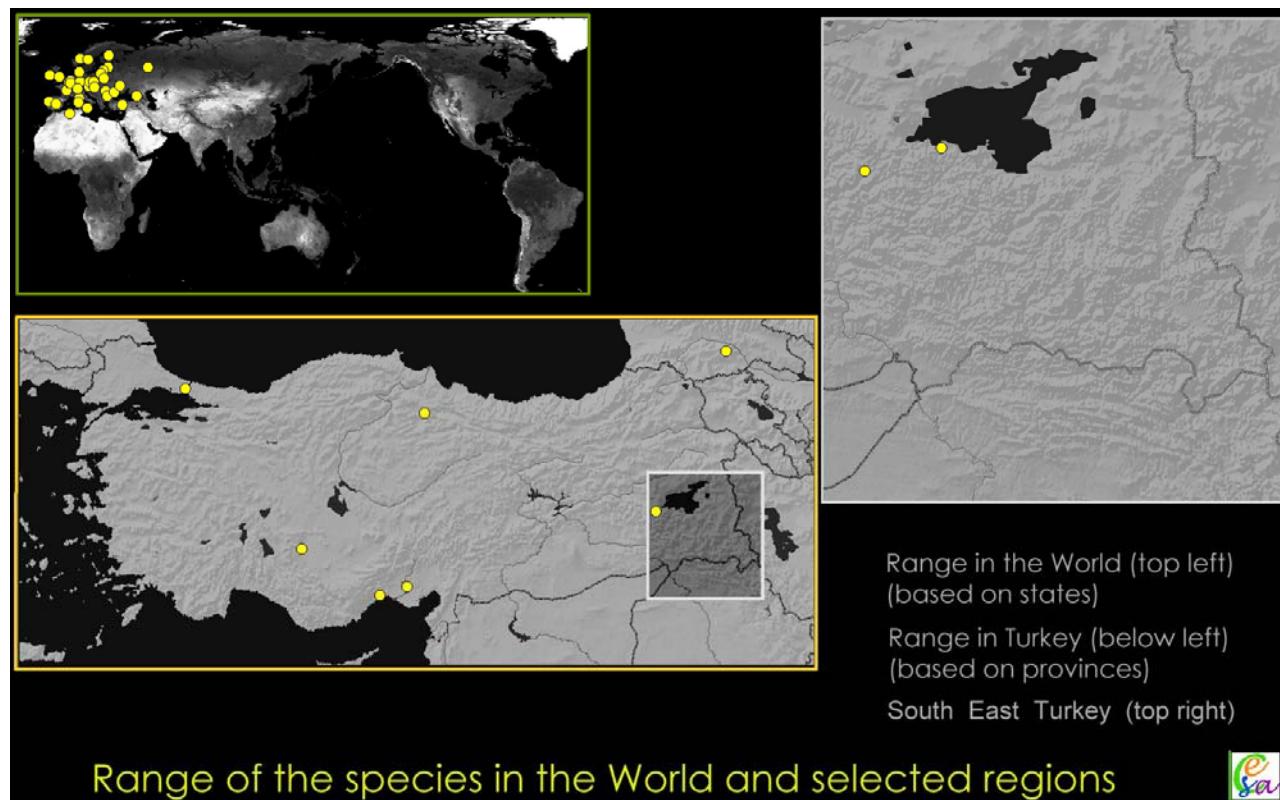


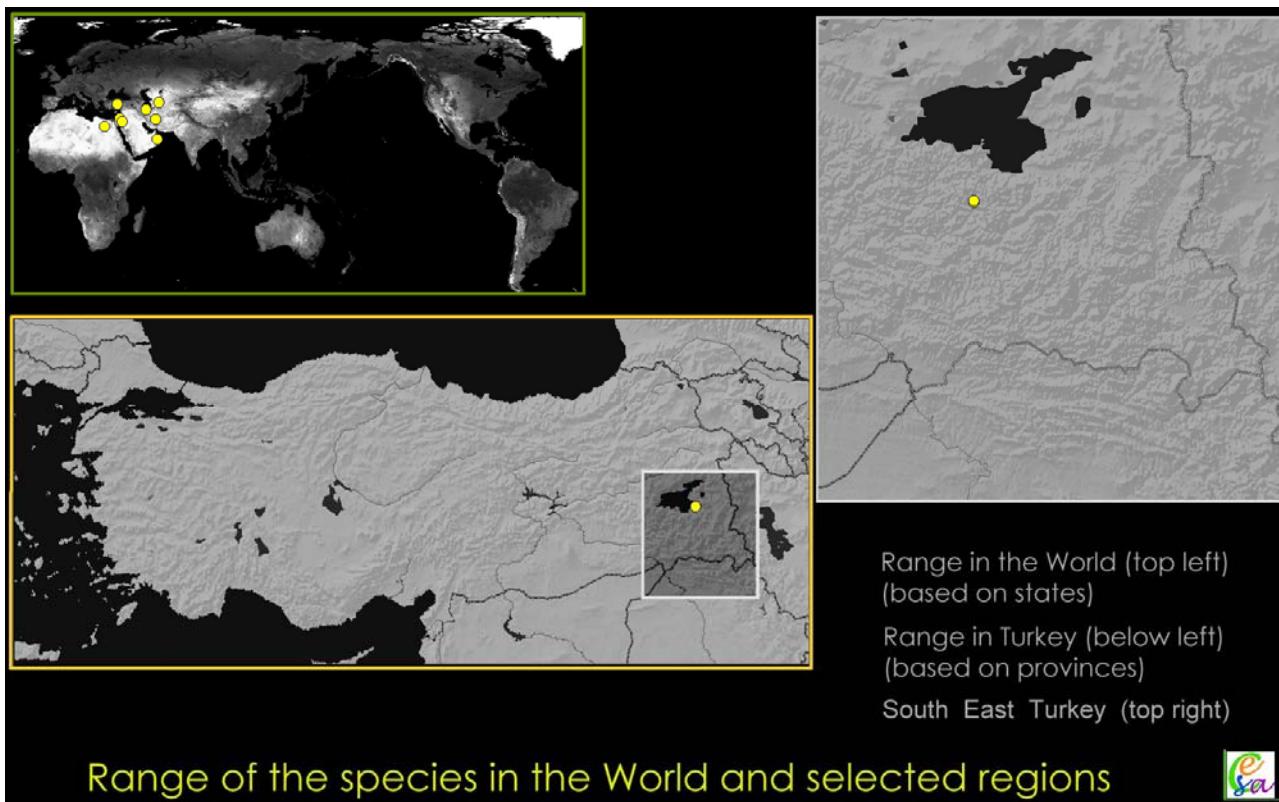
Map 2 - *Aleucis orientalis*.

Map 3 - *Alsophila hirsutaria*.Map 4 - *Aplasta ononaria*.

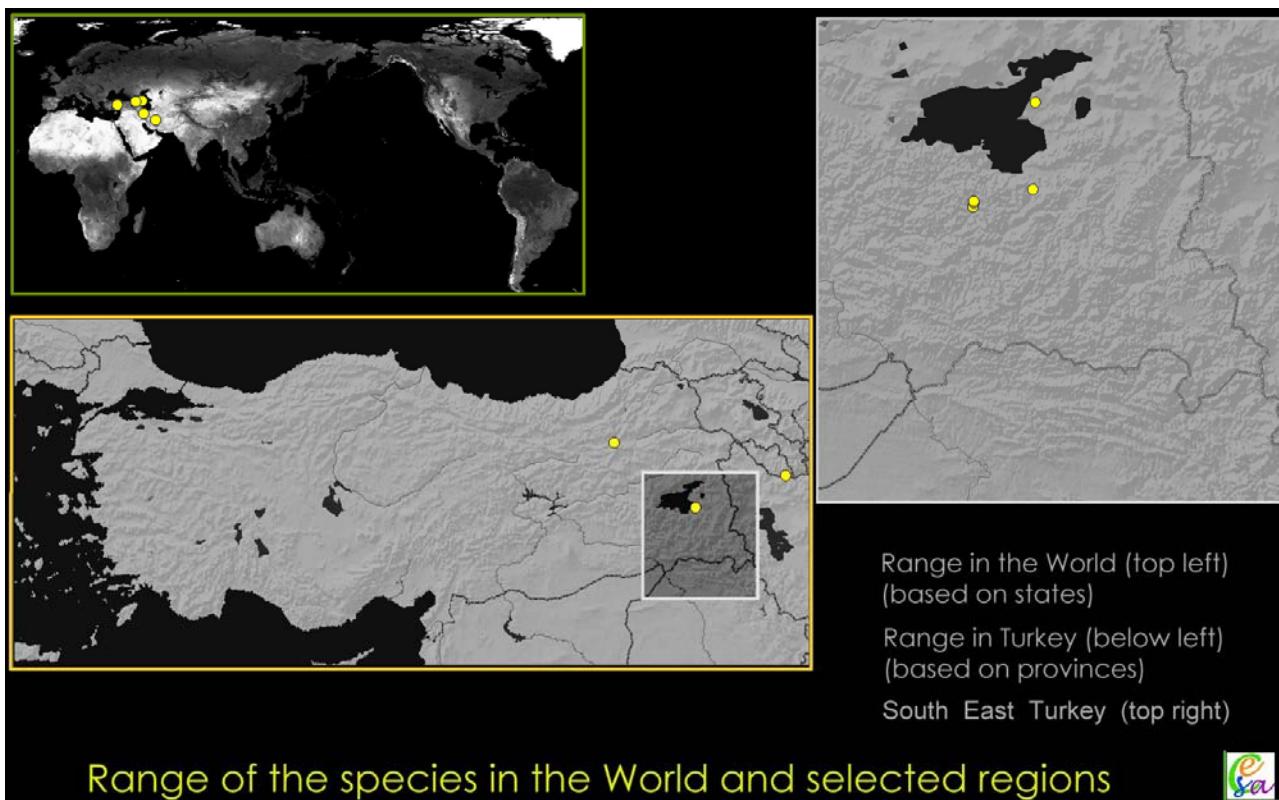
Map 5 - *Aplocera columbata*.Map 6 - *Aplocera opificata*.

Map 7 -*Apochima flabellaria*.Map 8 -*Aspitates quadripunctata*.

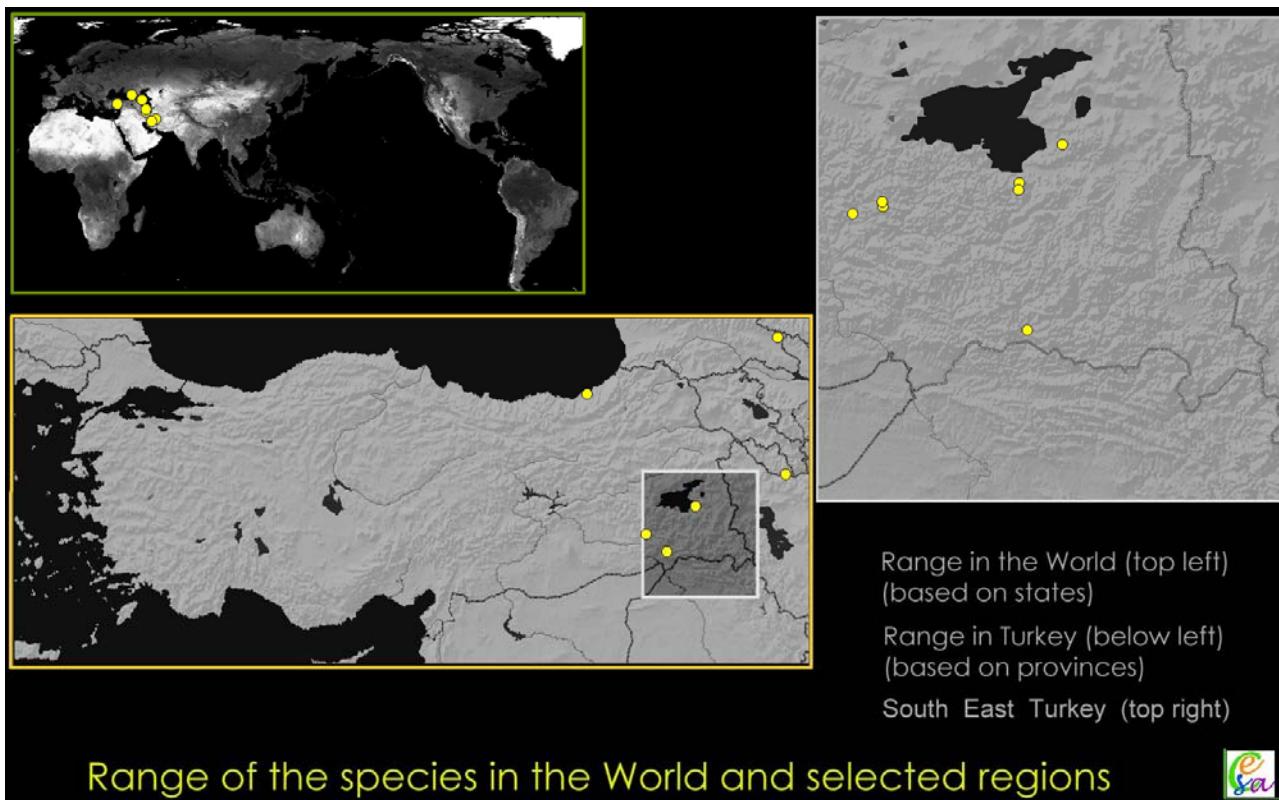
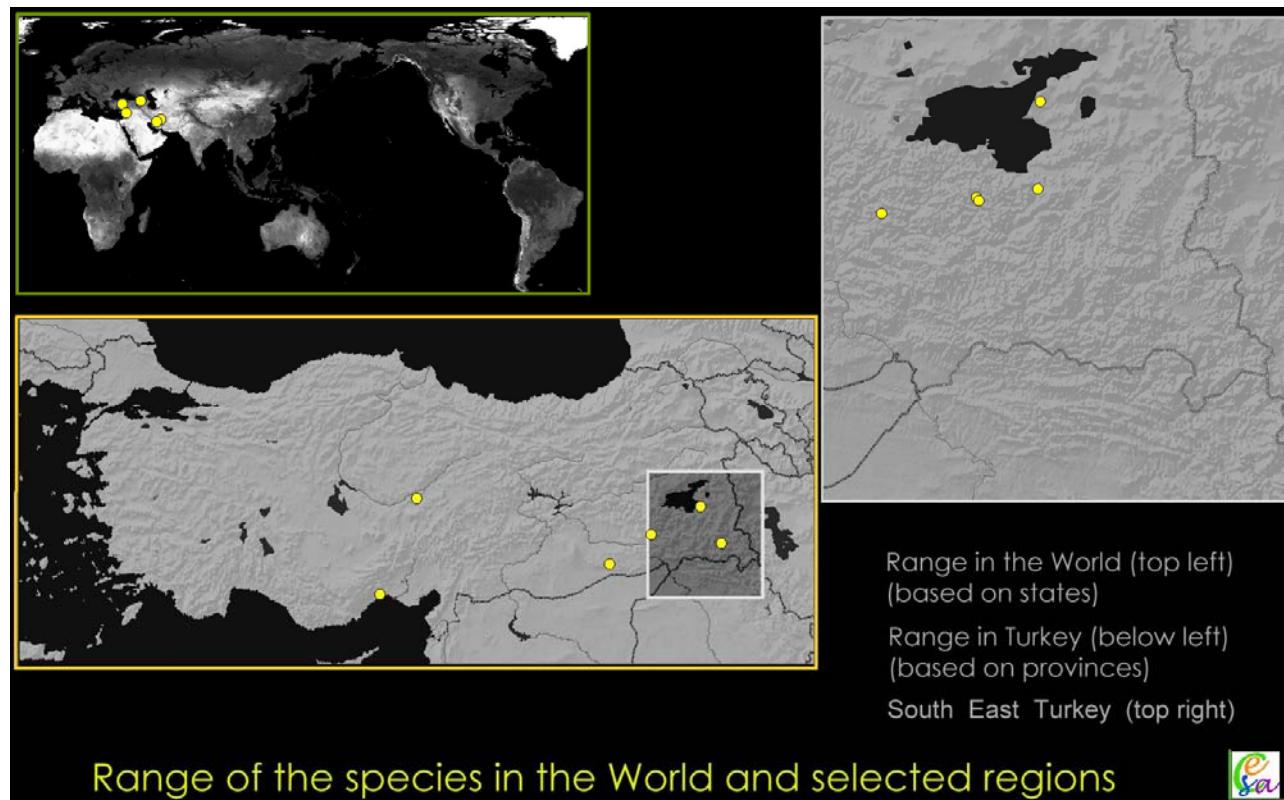
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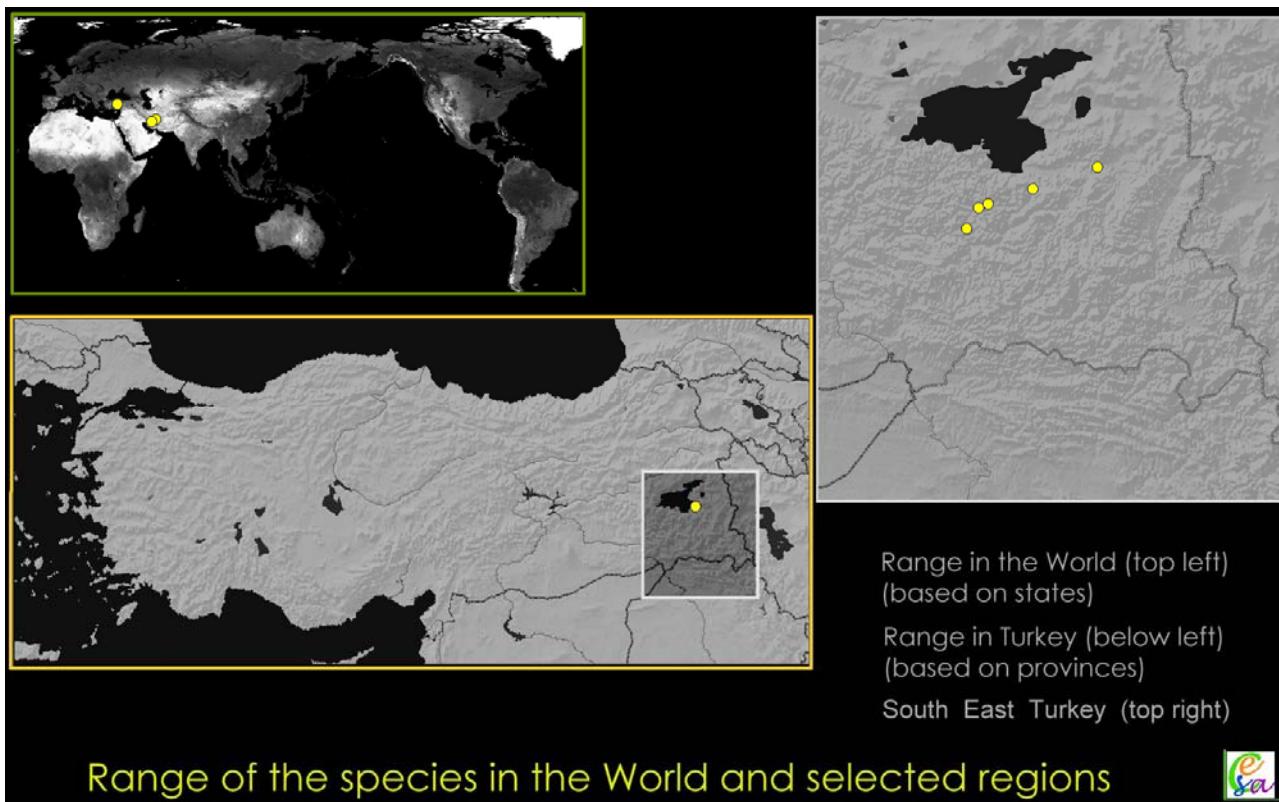
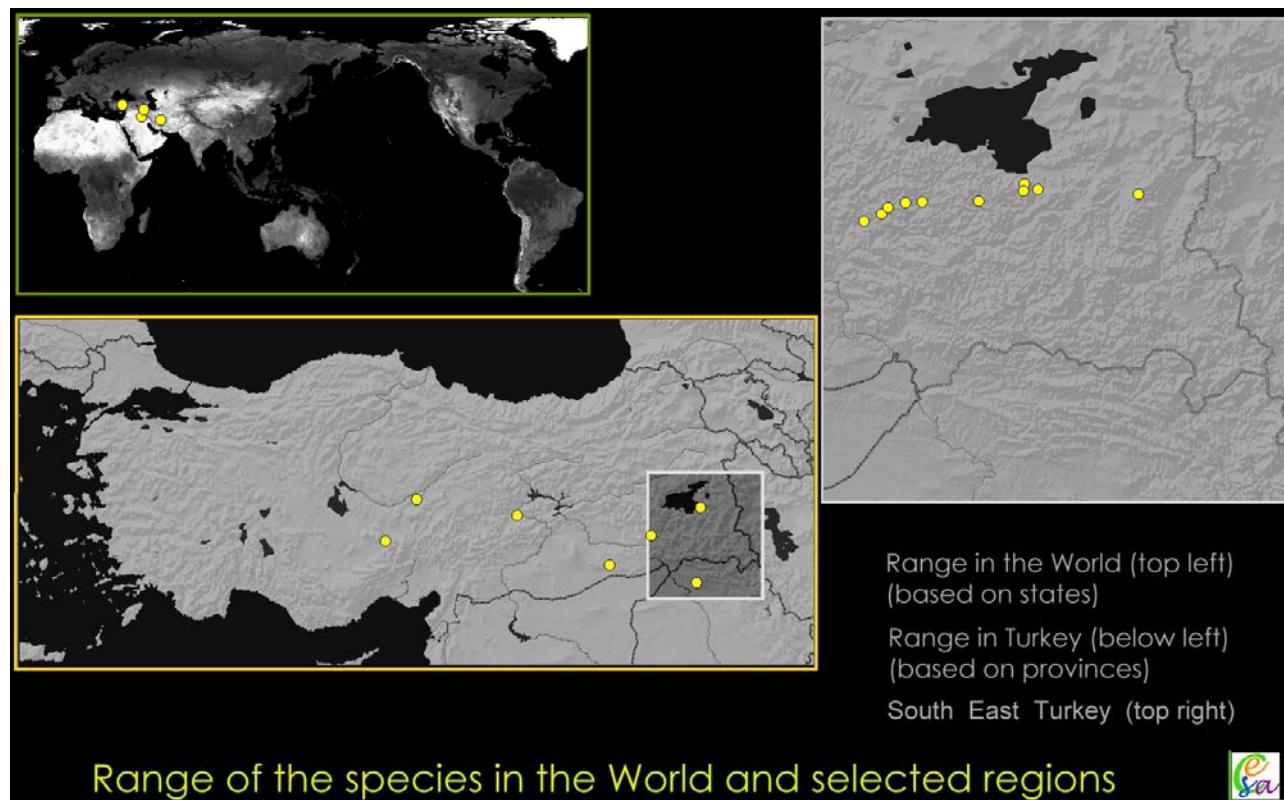


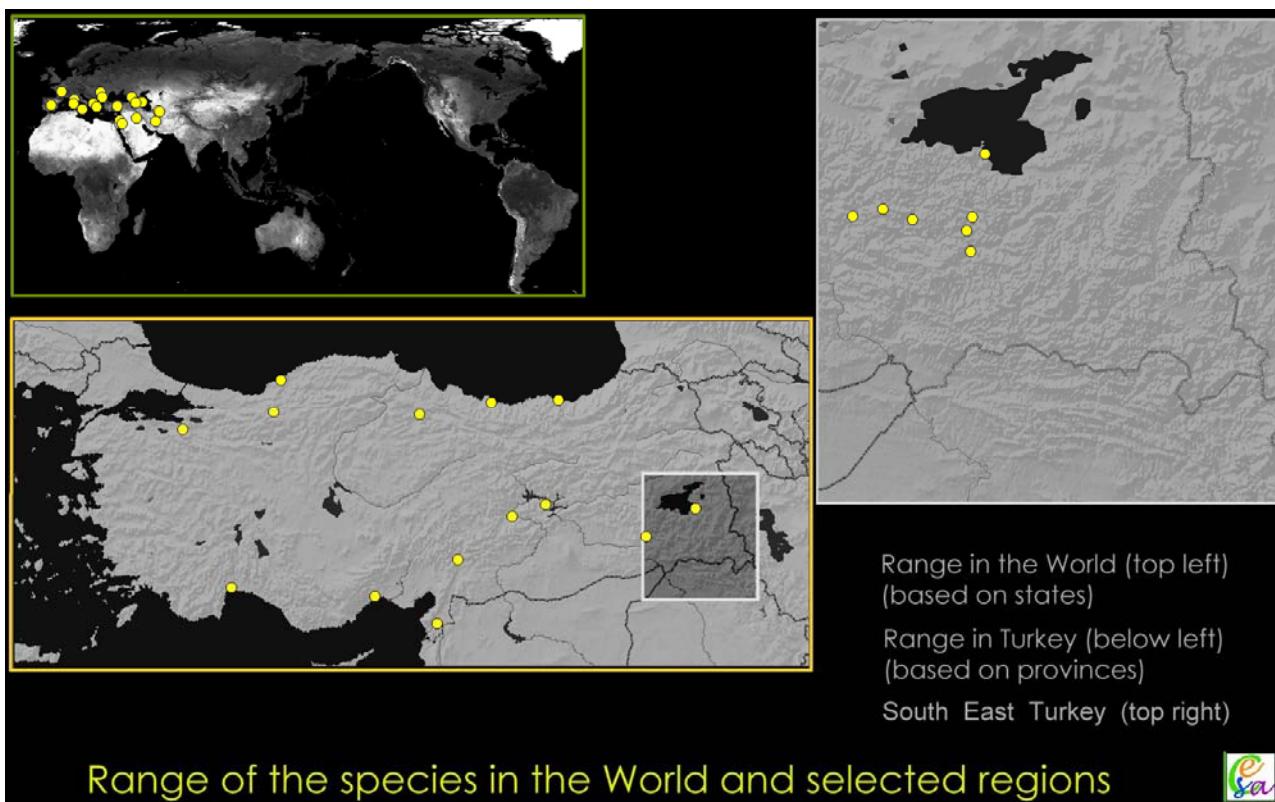
Map 11 -*Charissa (Cnестrogноphos) luticiliata*.



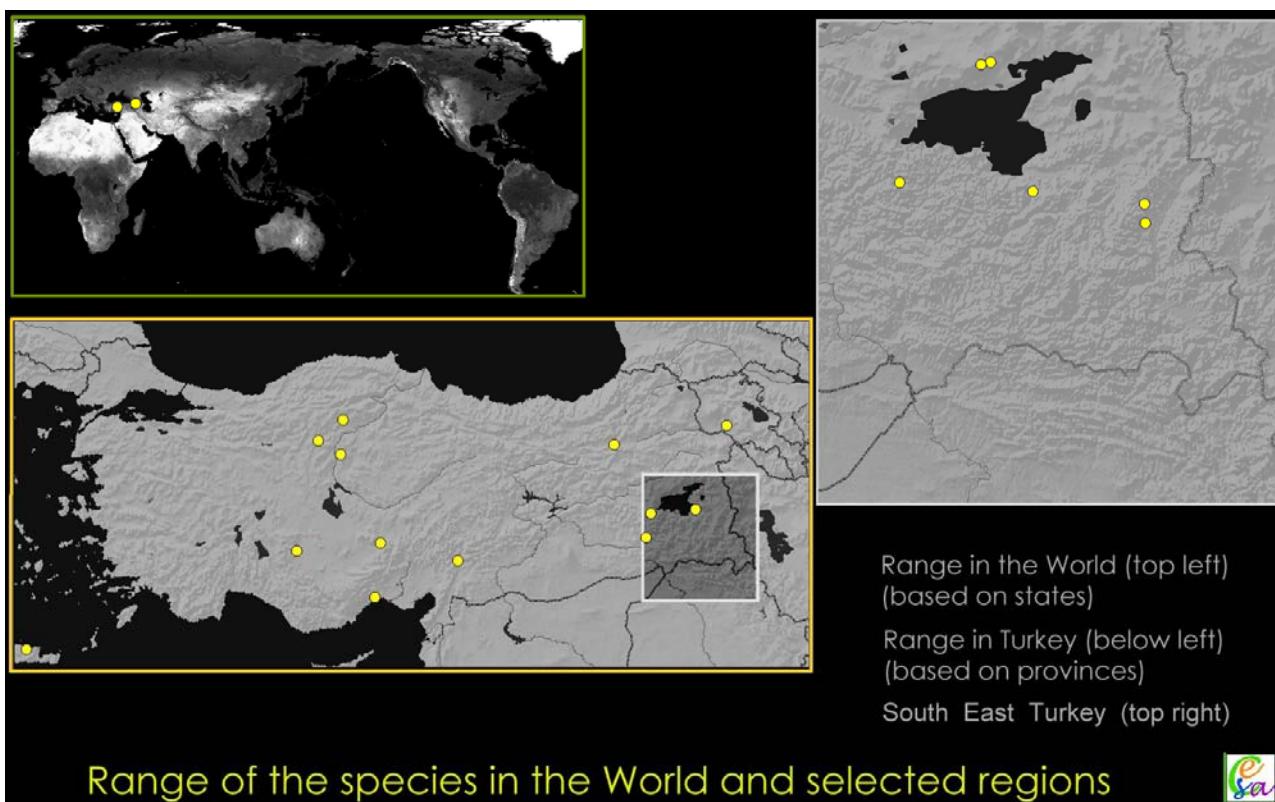
Map 12 -*Charissa (Cnестrogноphos) rjabovi*.

Map 13 - *Charissa (Euchrognophos) annubilata*.Map 14 - *Charissa (Euchrognophos) dubitaria*.

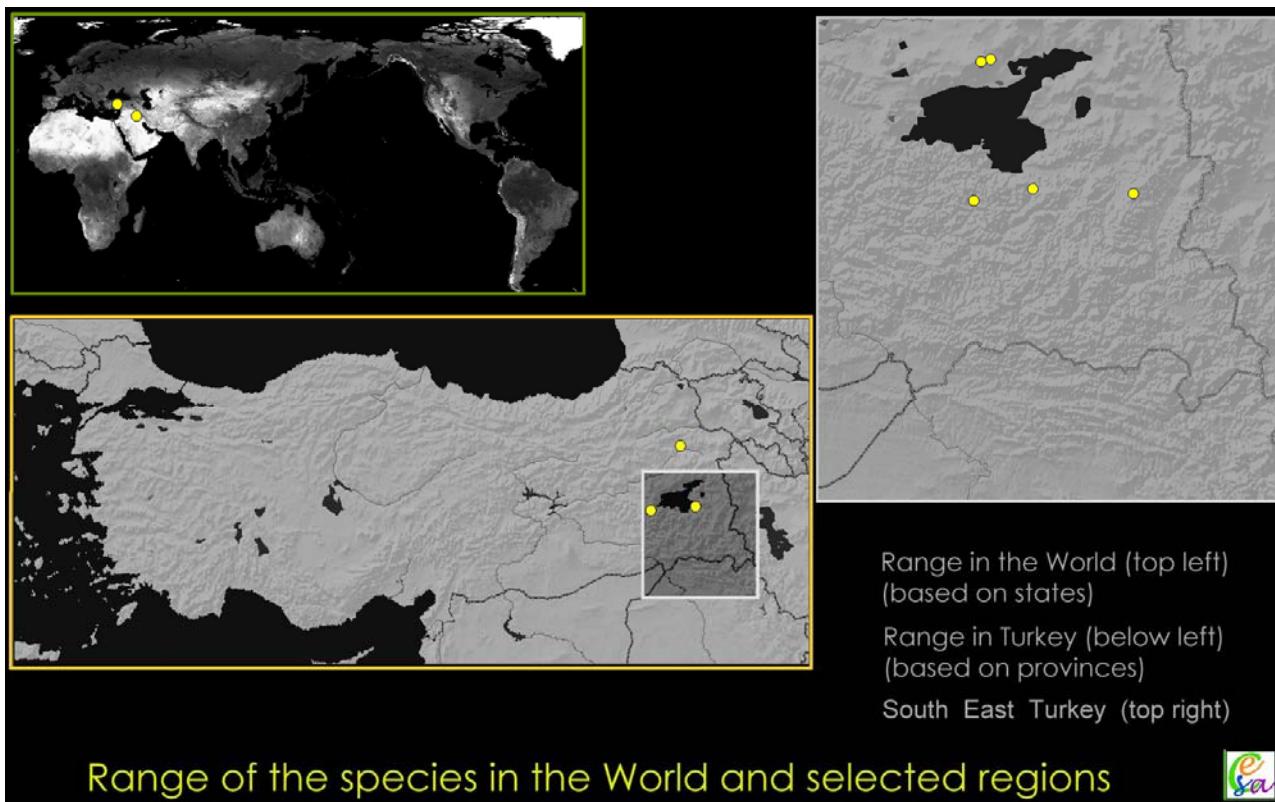
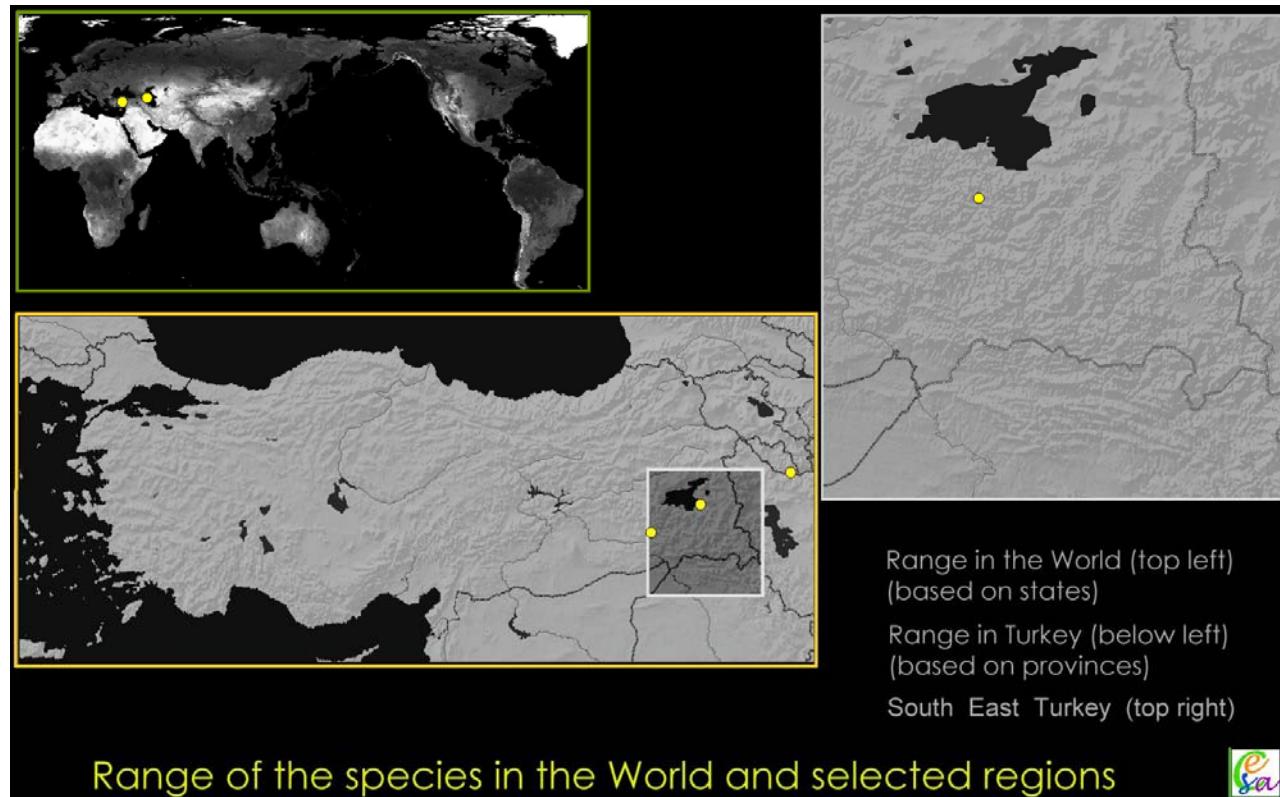
Map 15 - *Charissa (Kemtroggnophos) argillata*.Map 16 - *Charissa (Kemtroggnophos) mardinaria*.

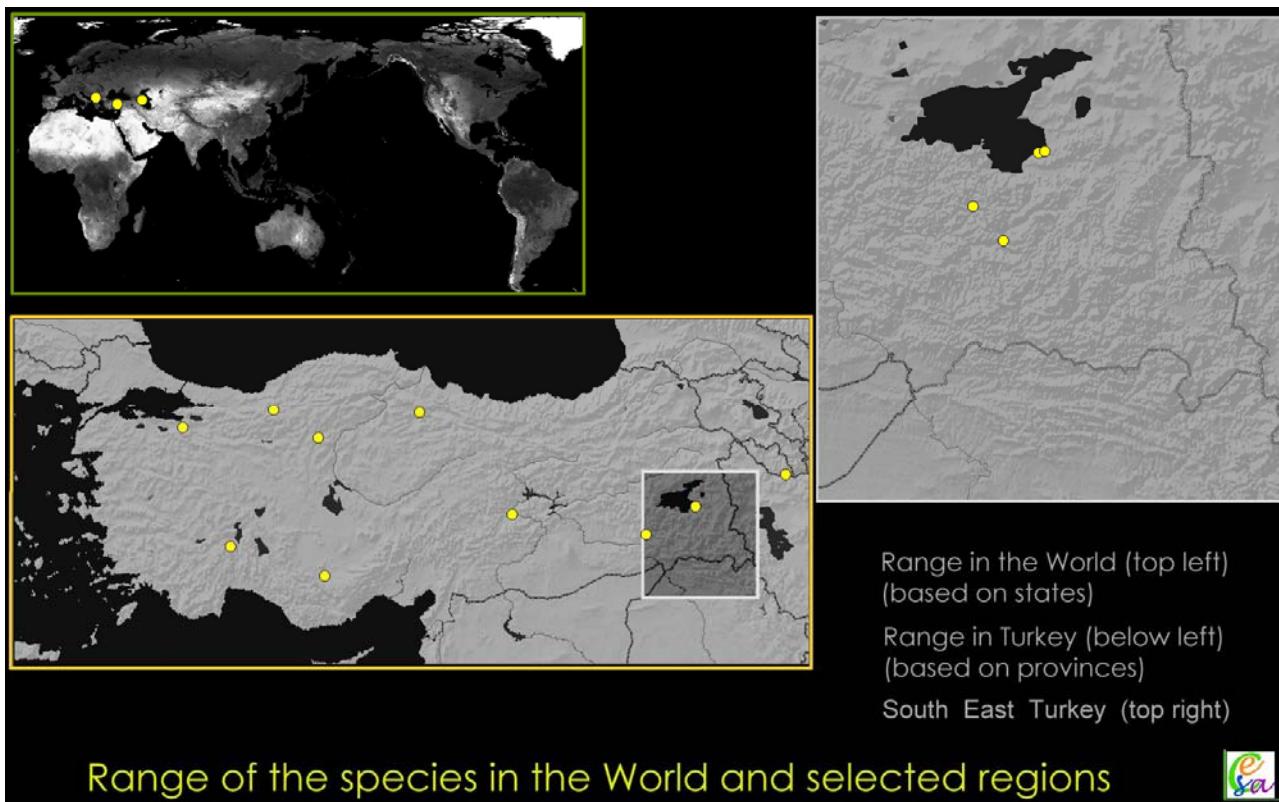
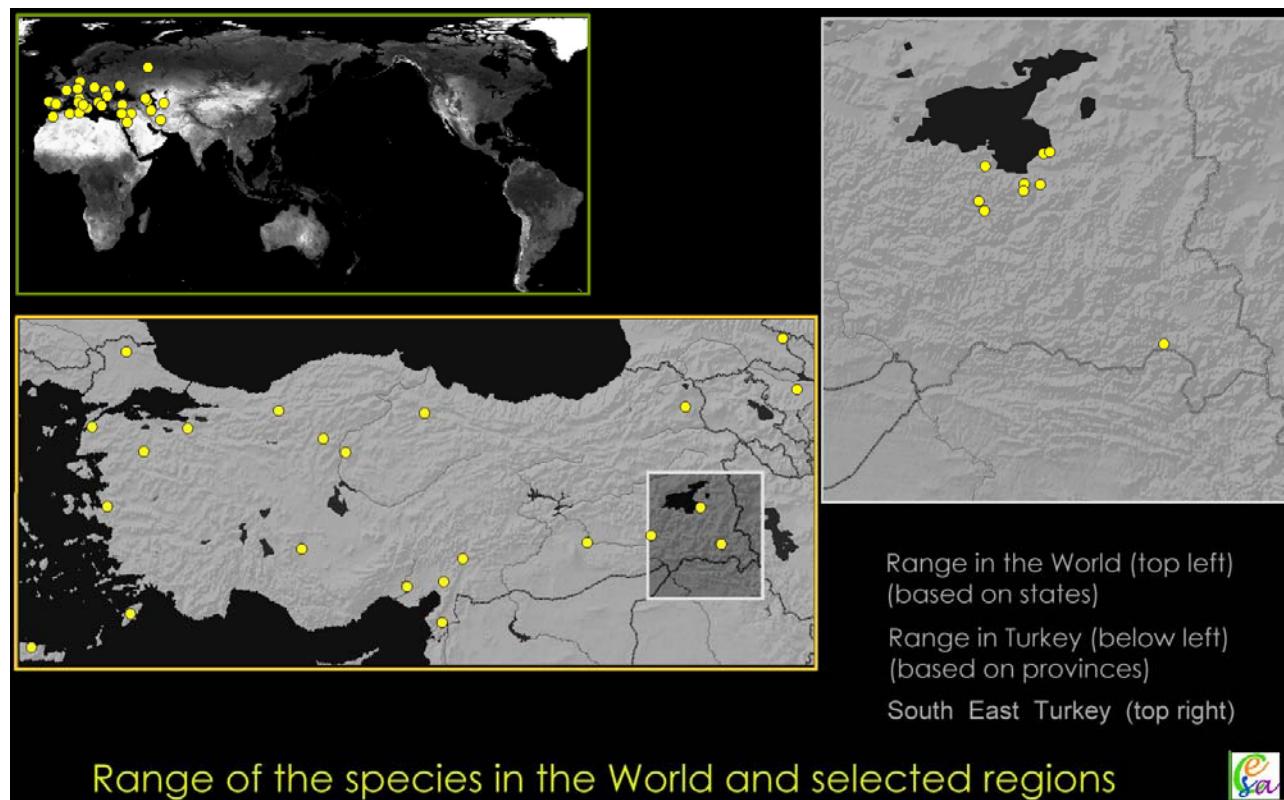


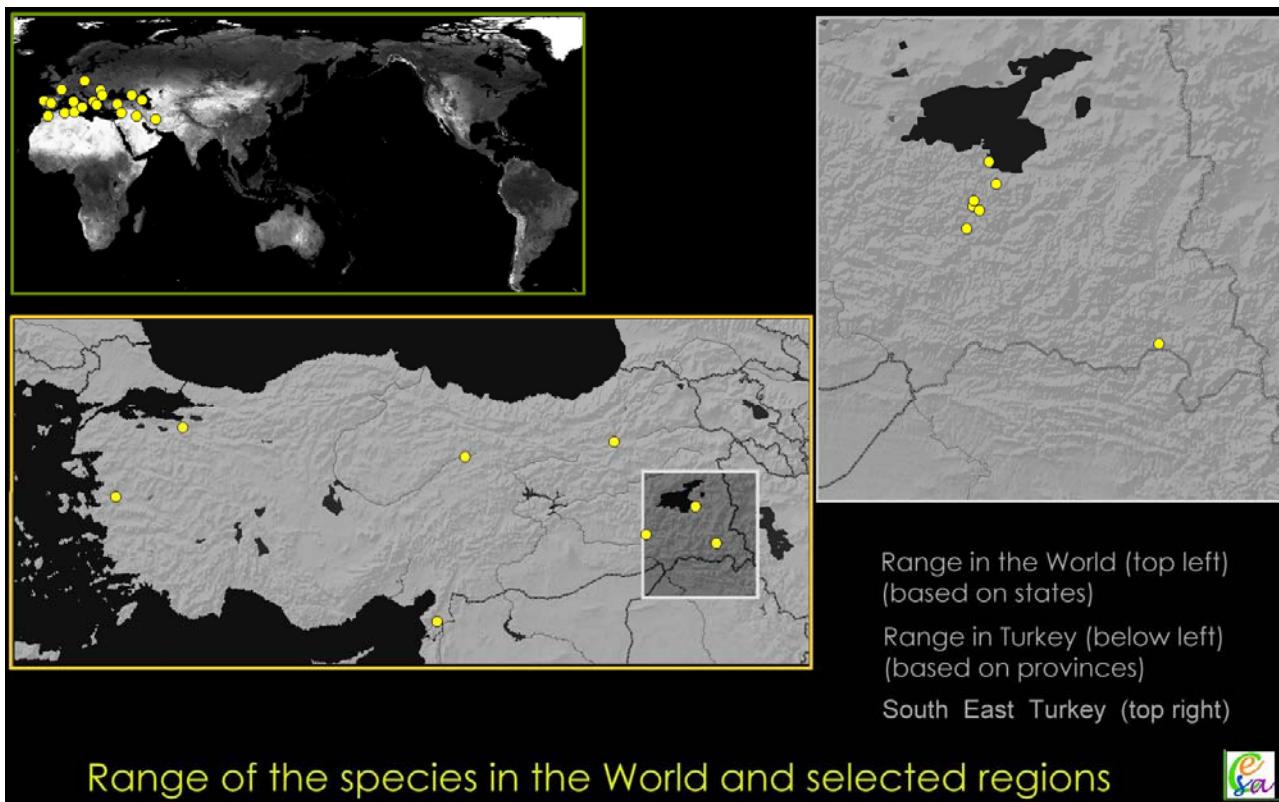
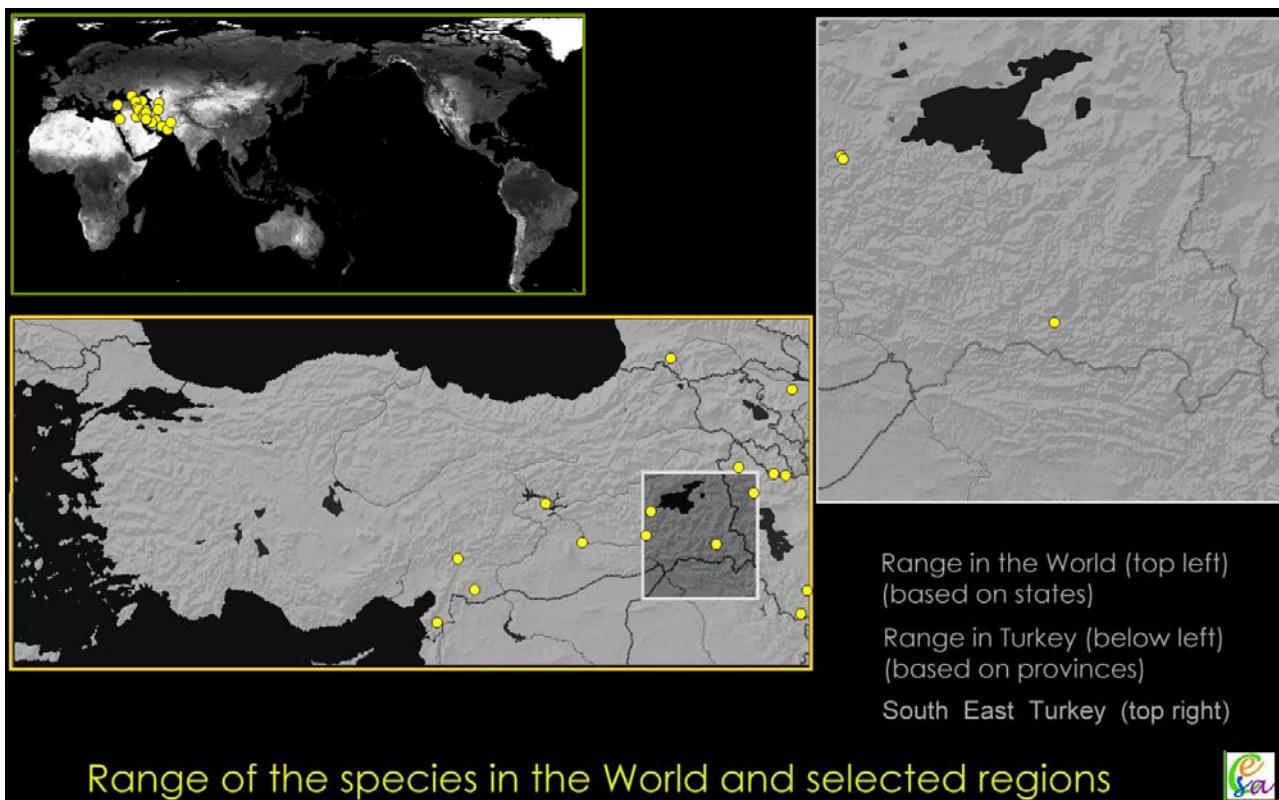
Map 17 -*Charissa (Kemtroggnophos) onustaria*.

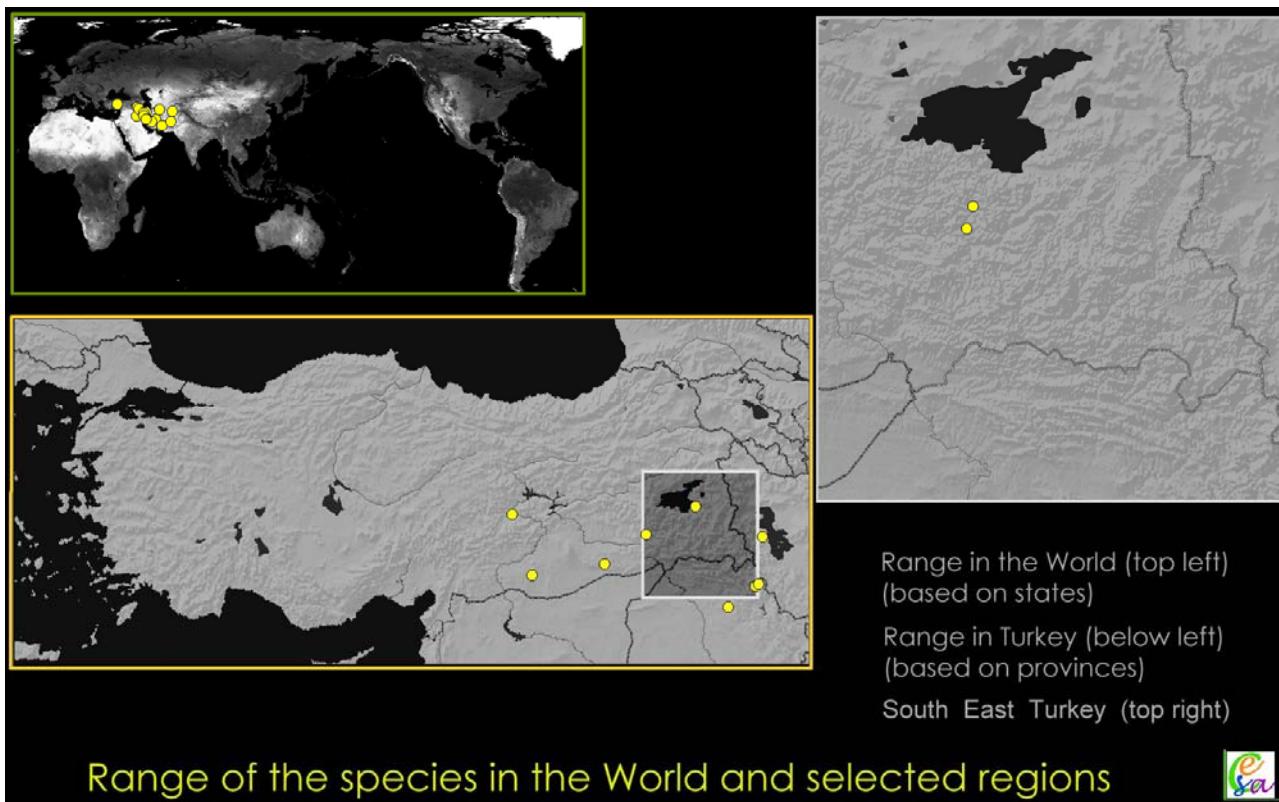
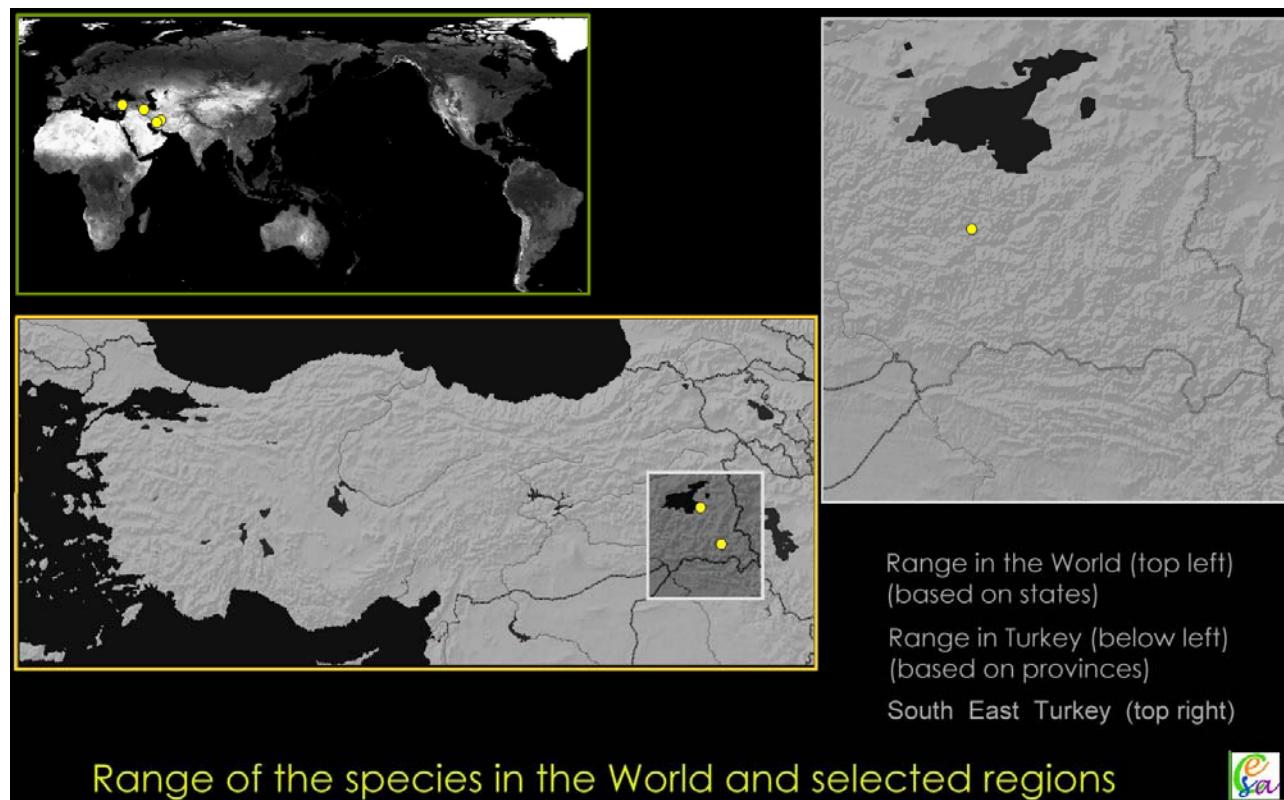


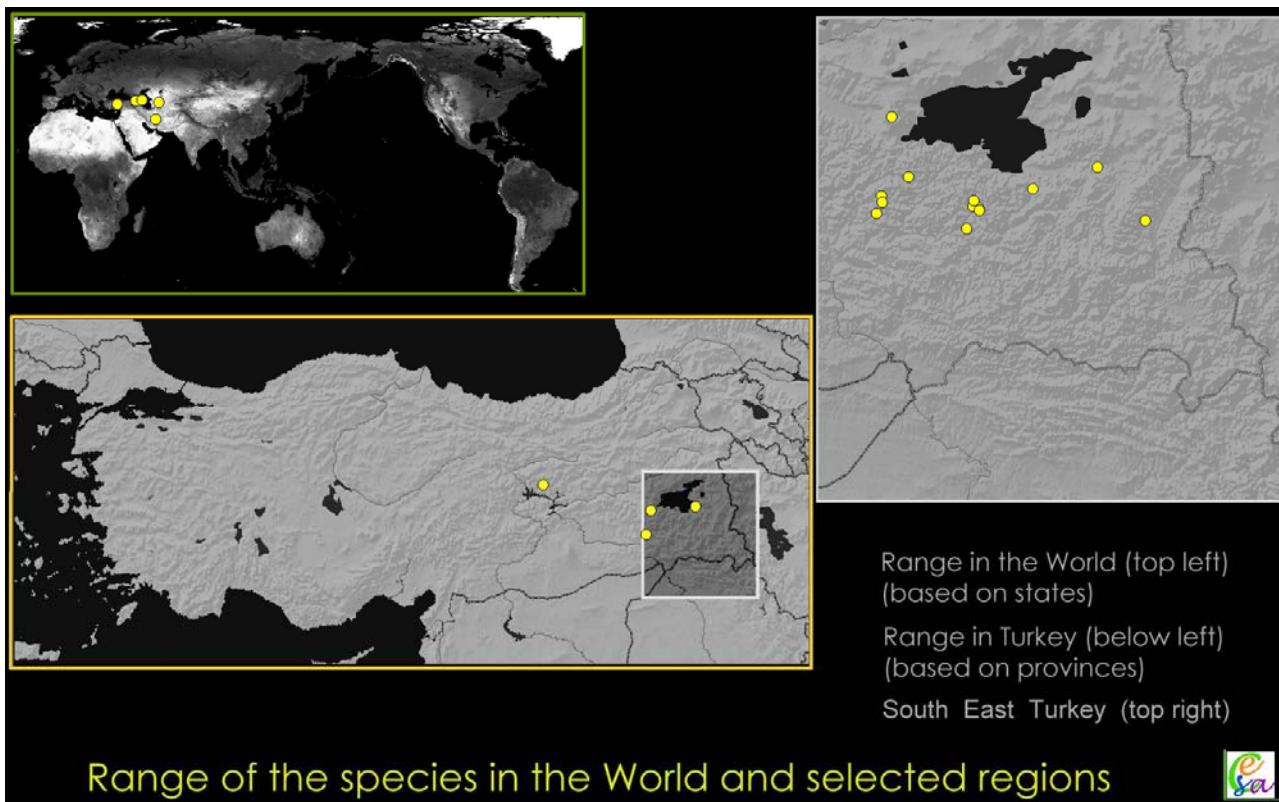
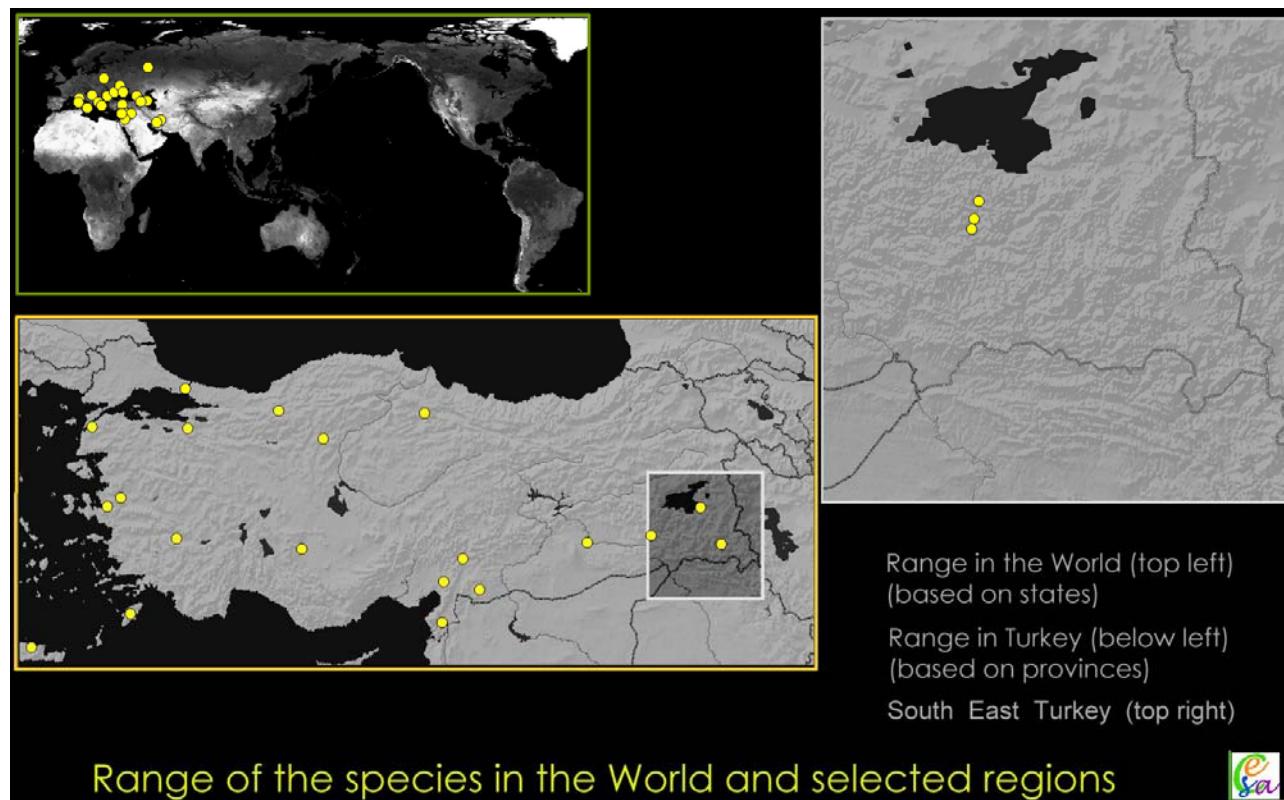
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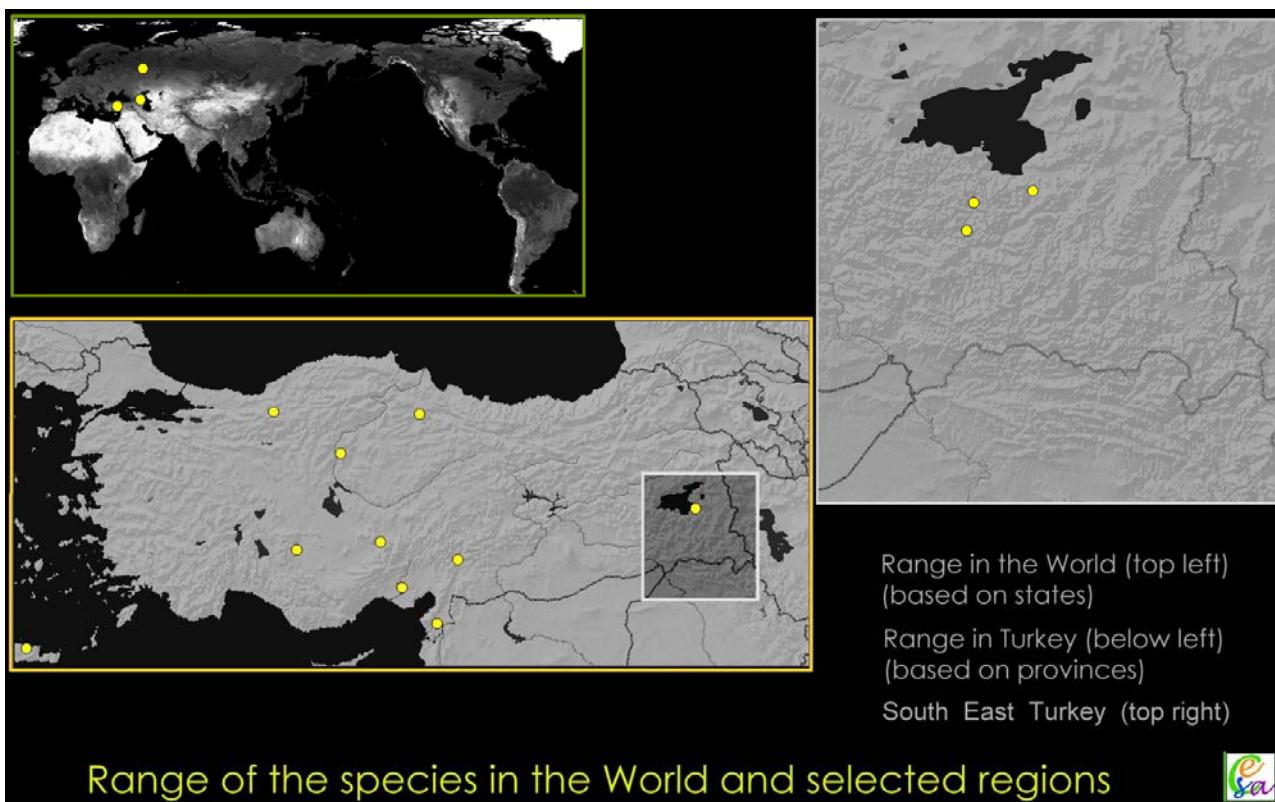
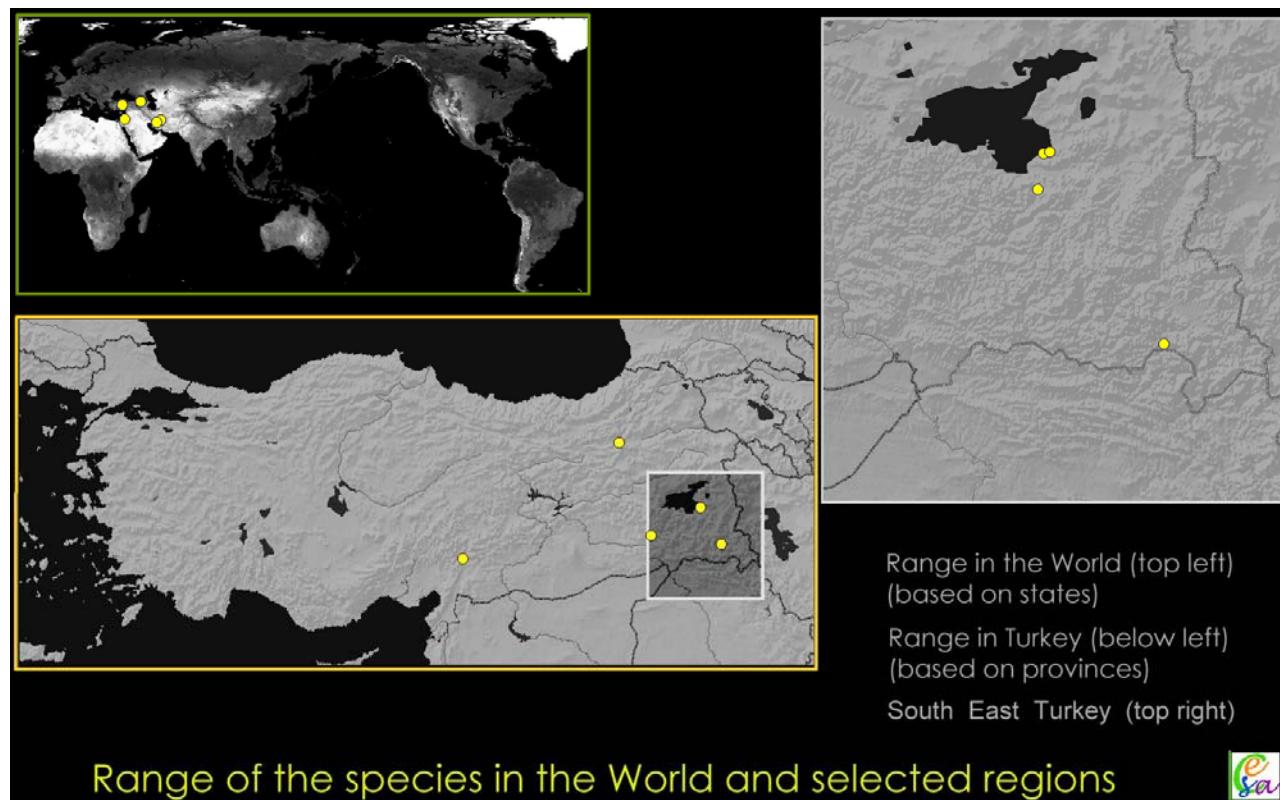
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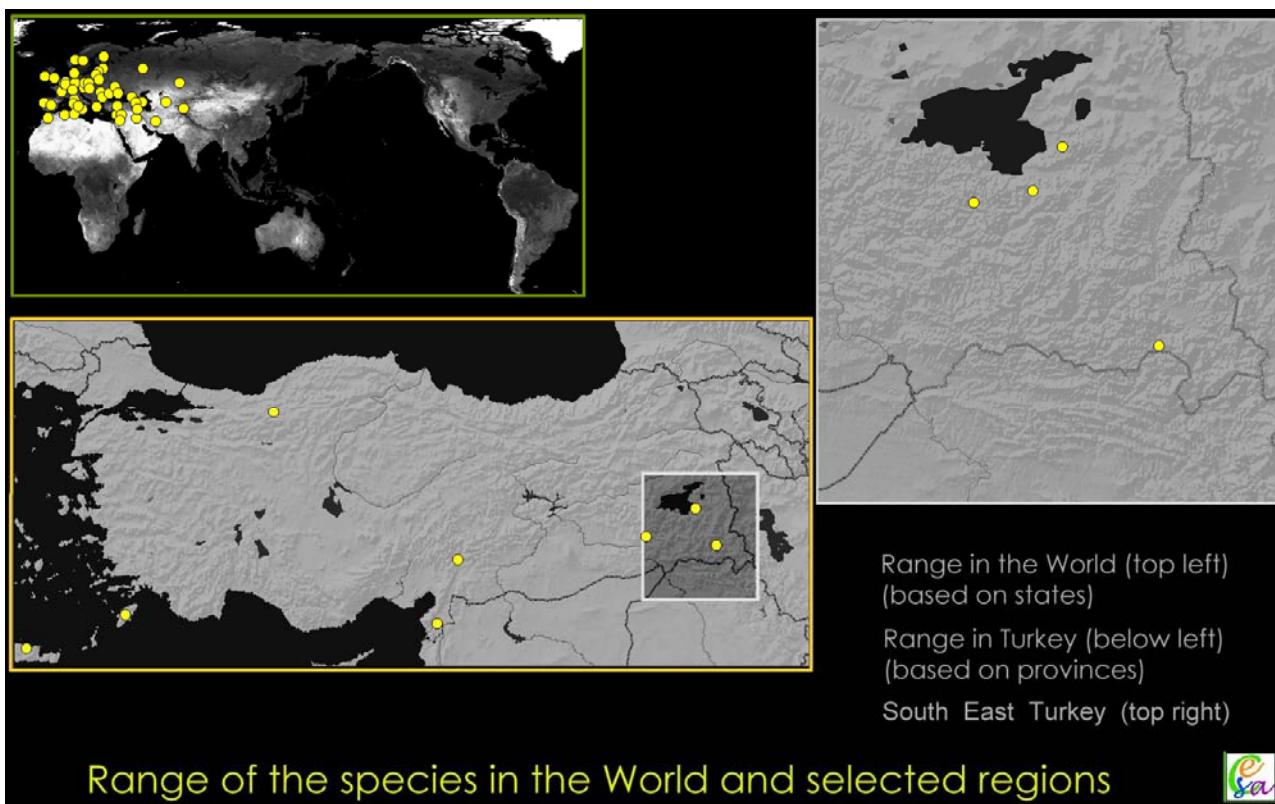
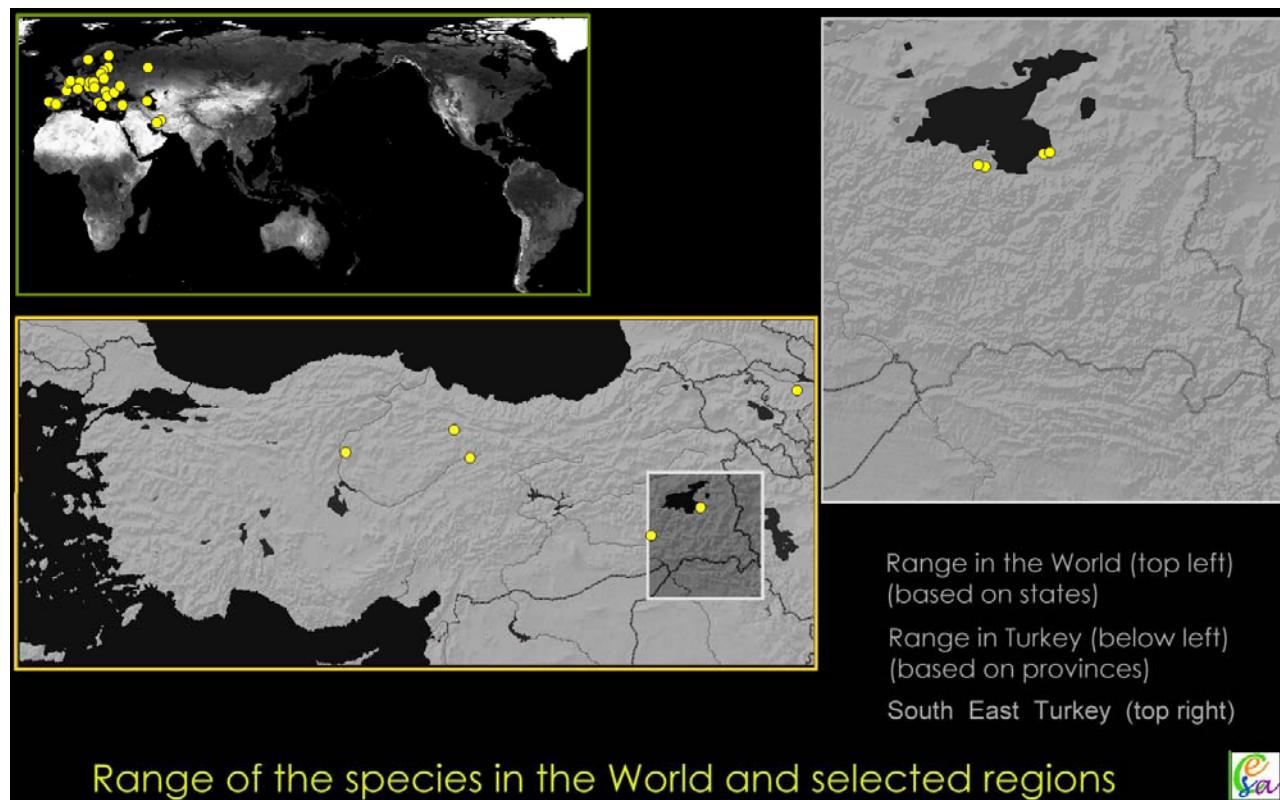
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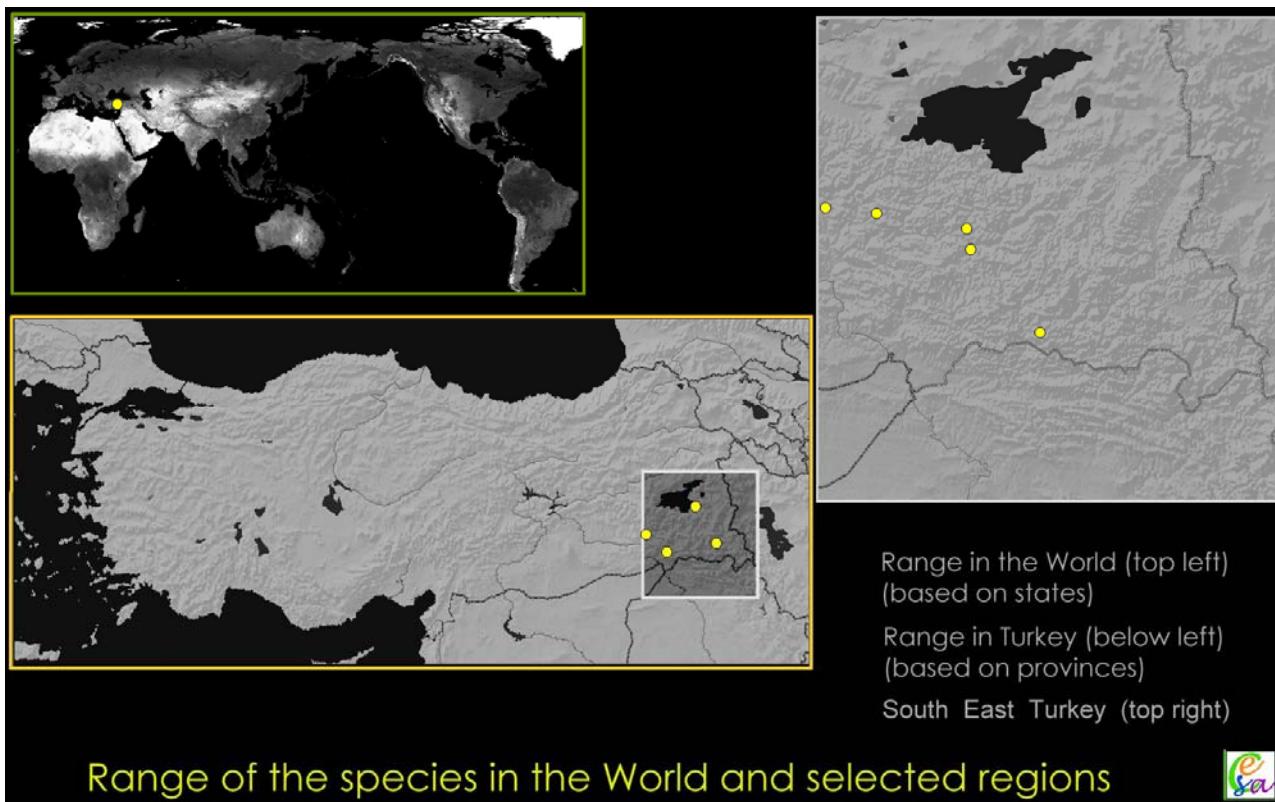
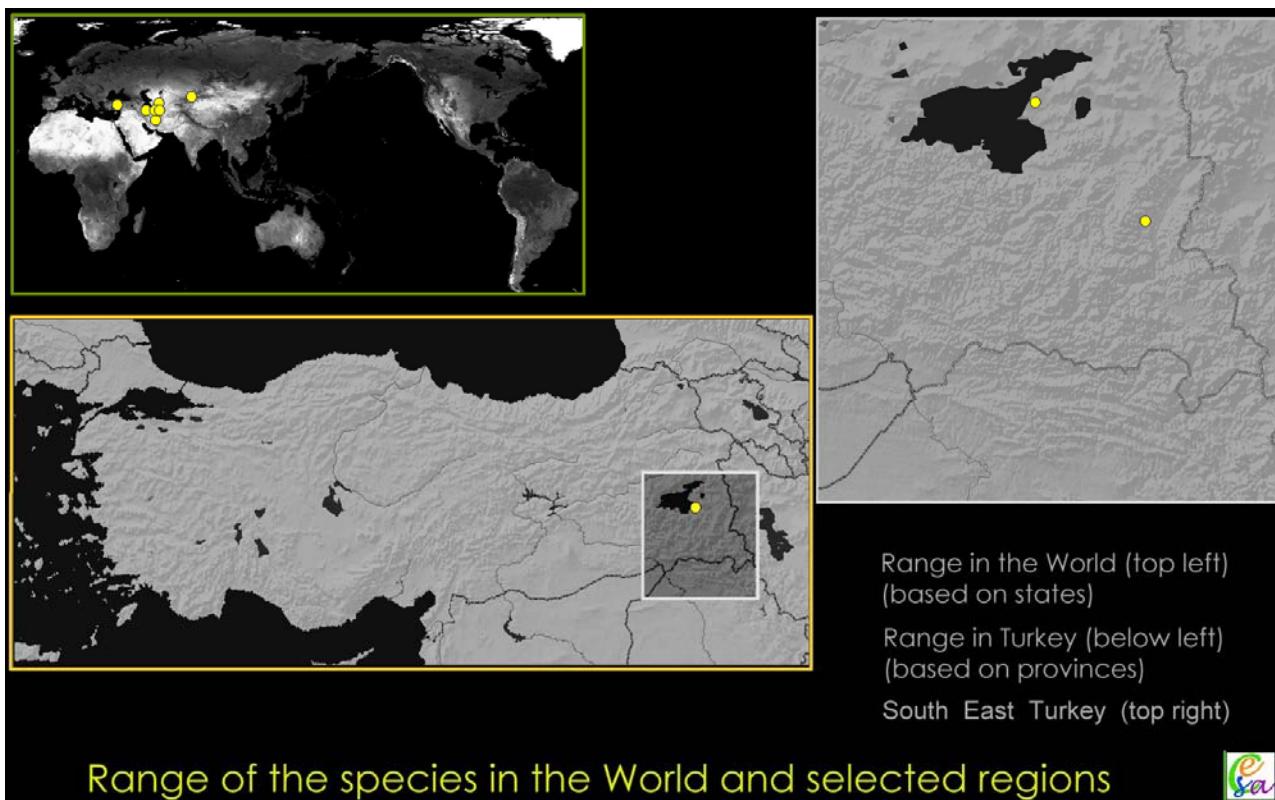
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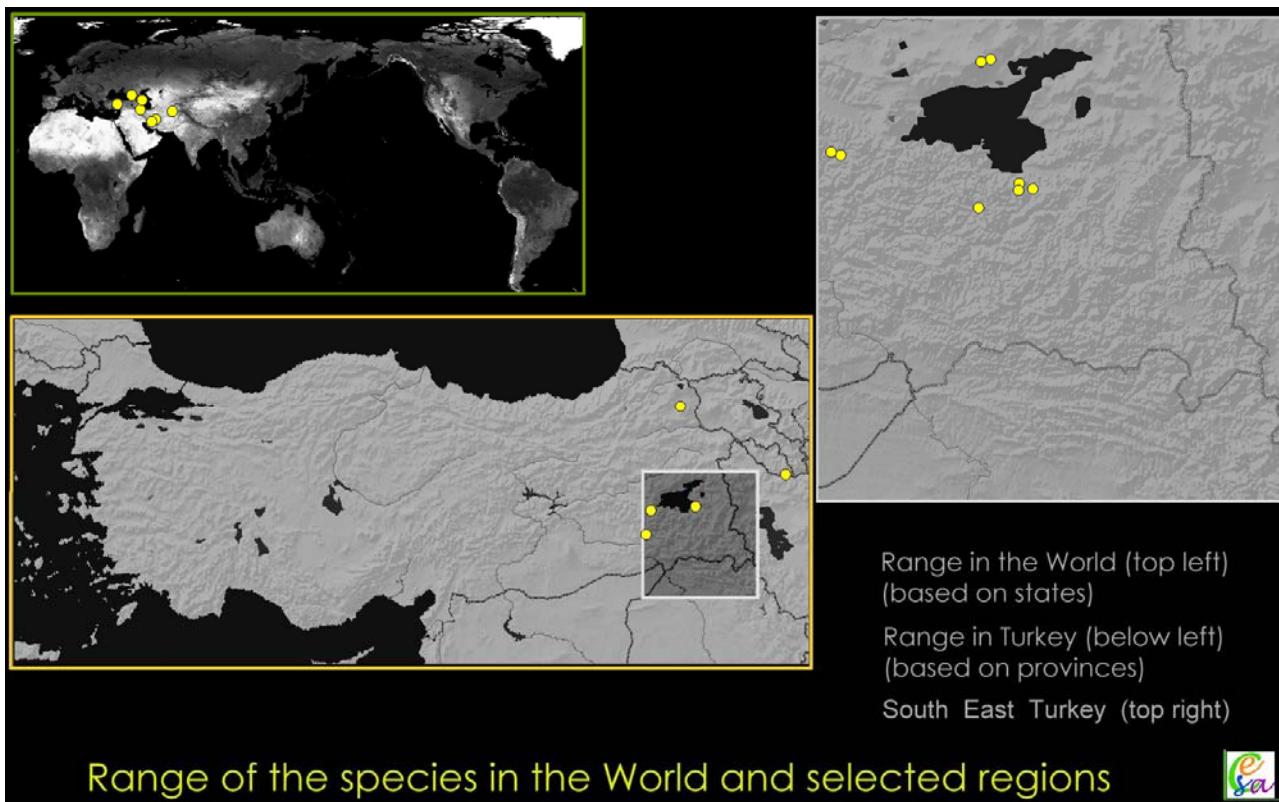
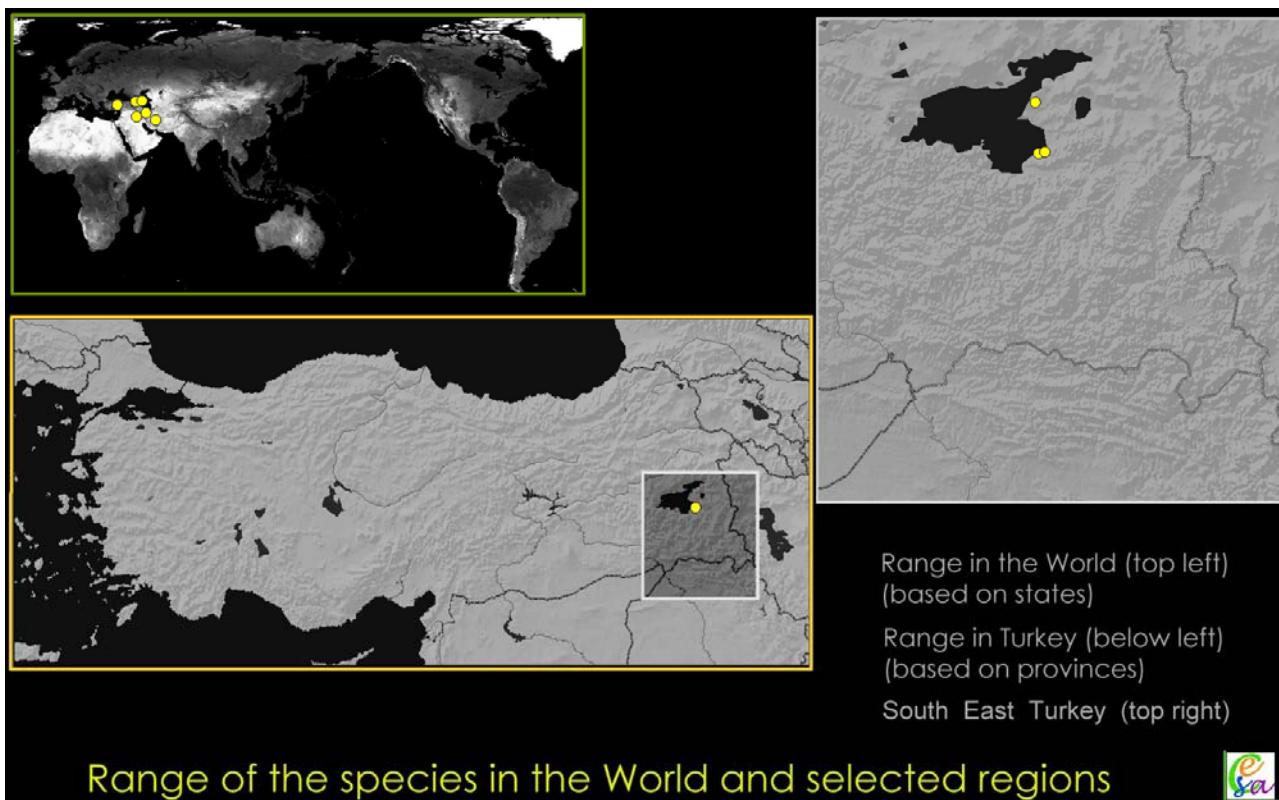
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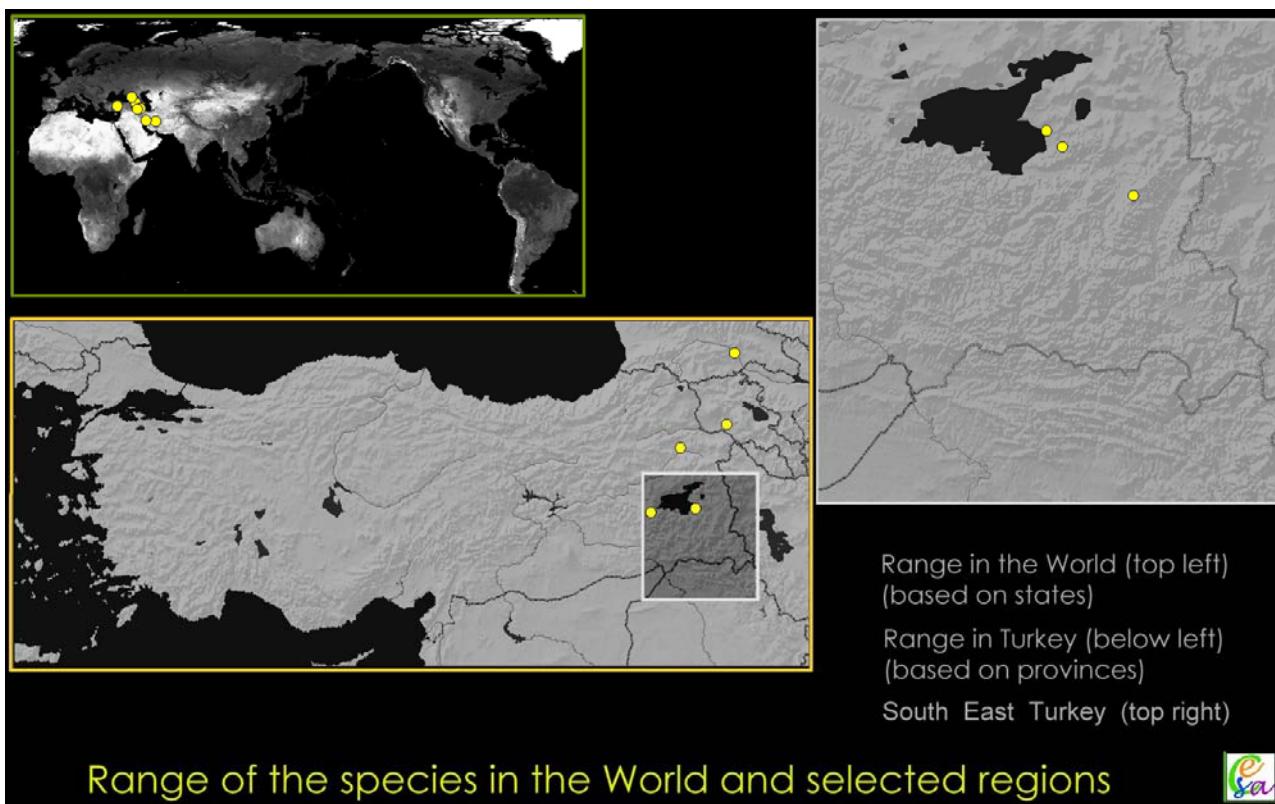
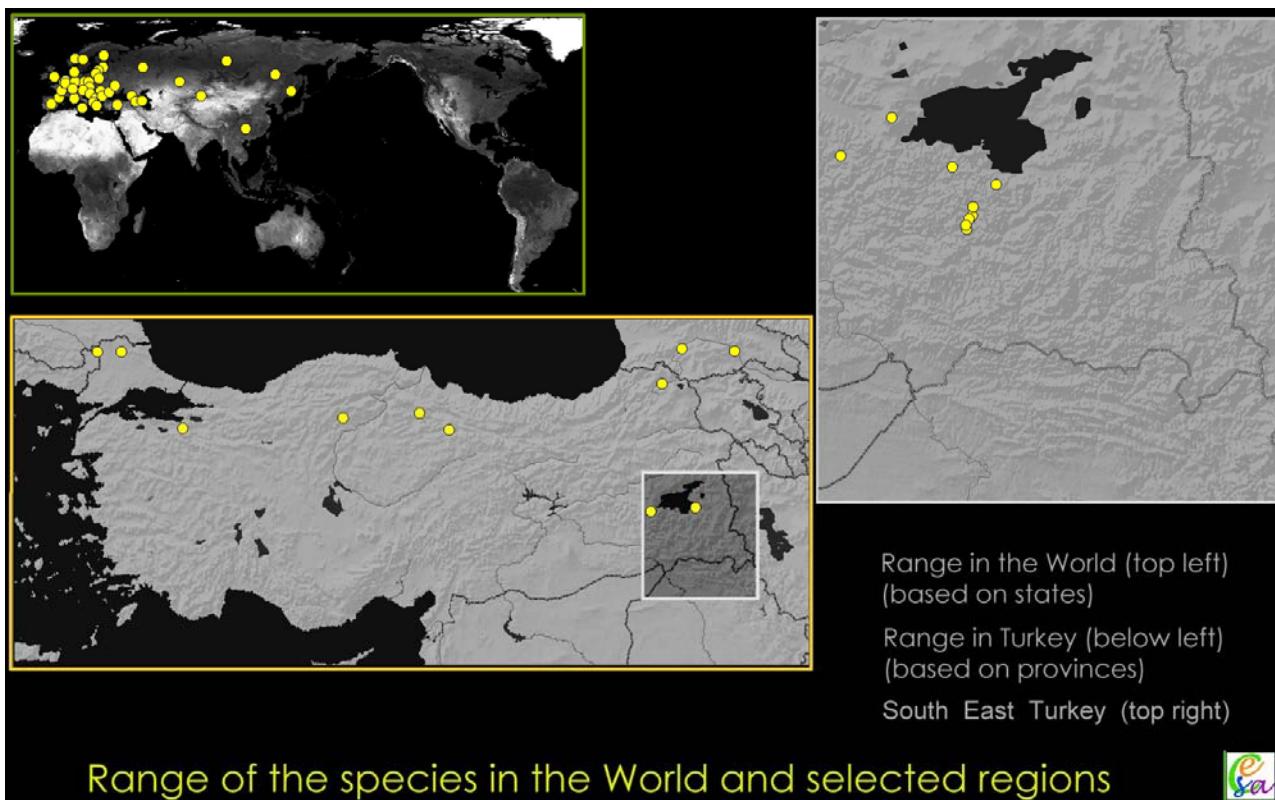
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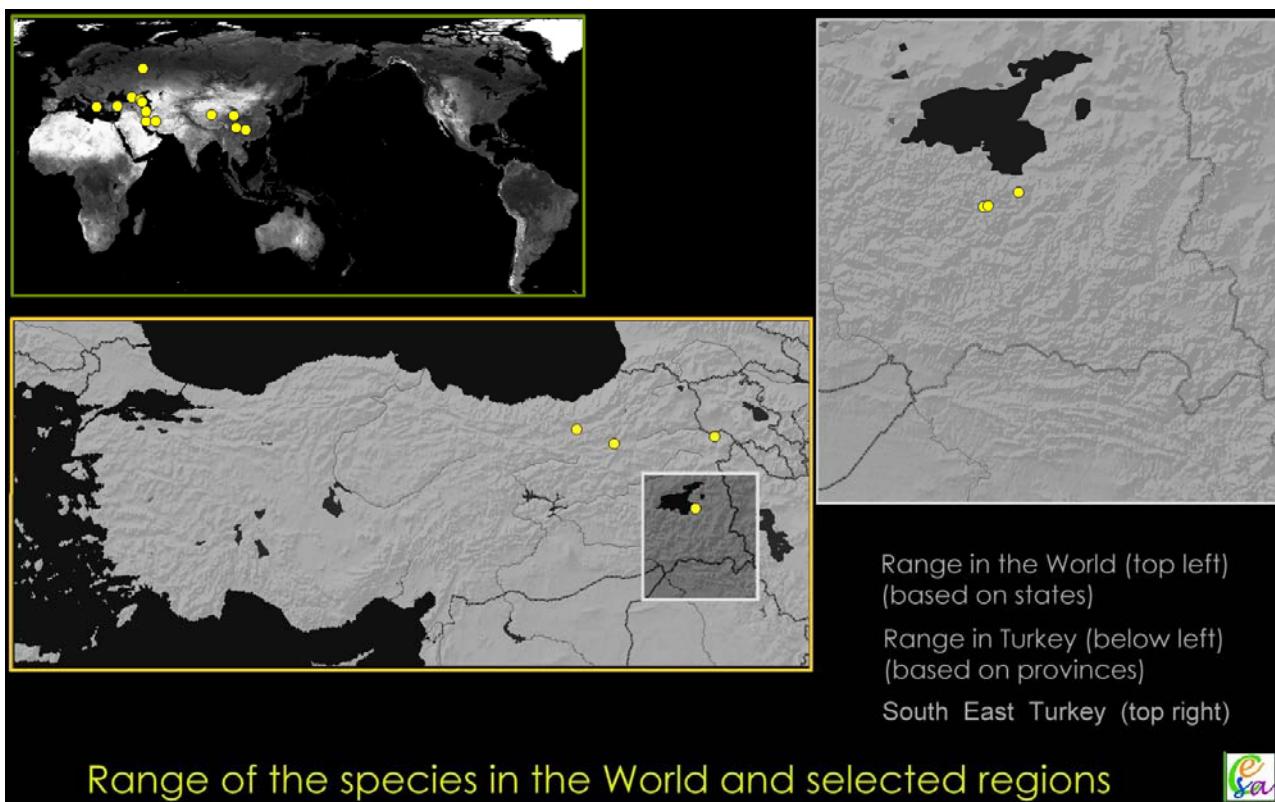
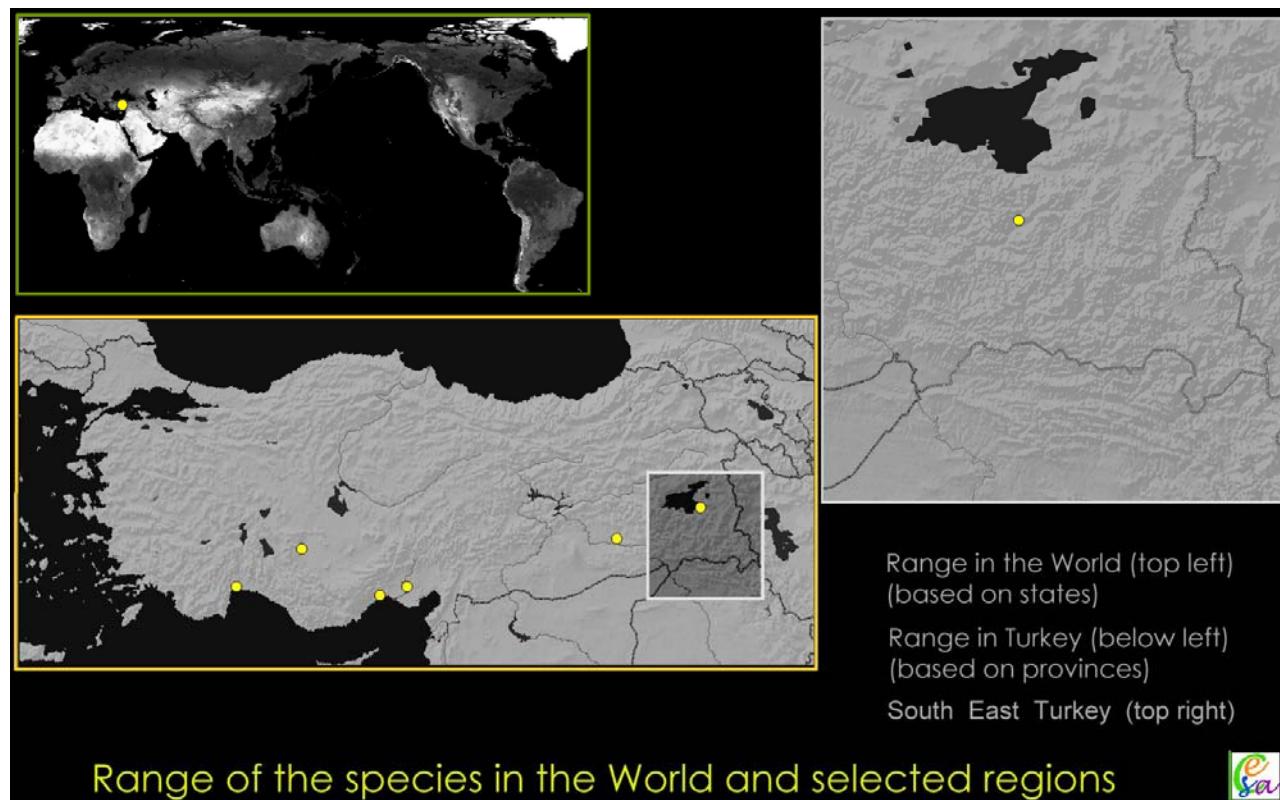
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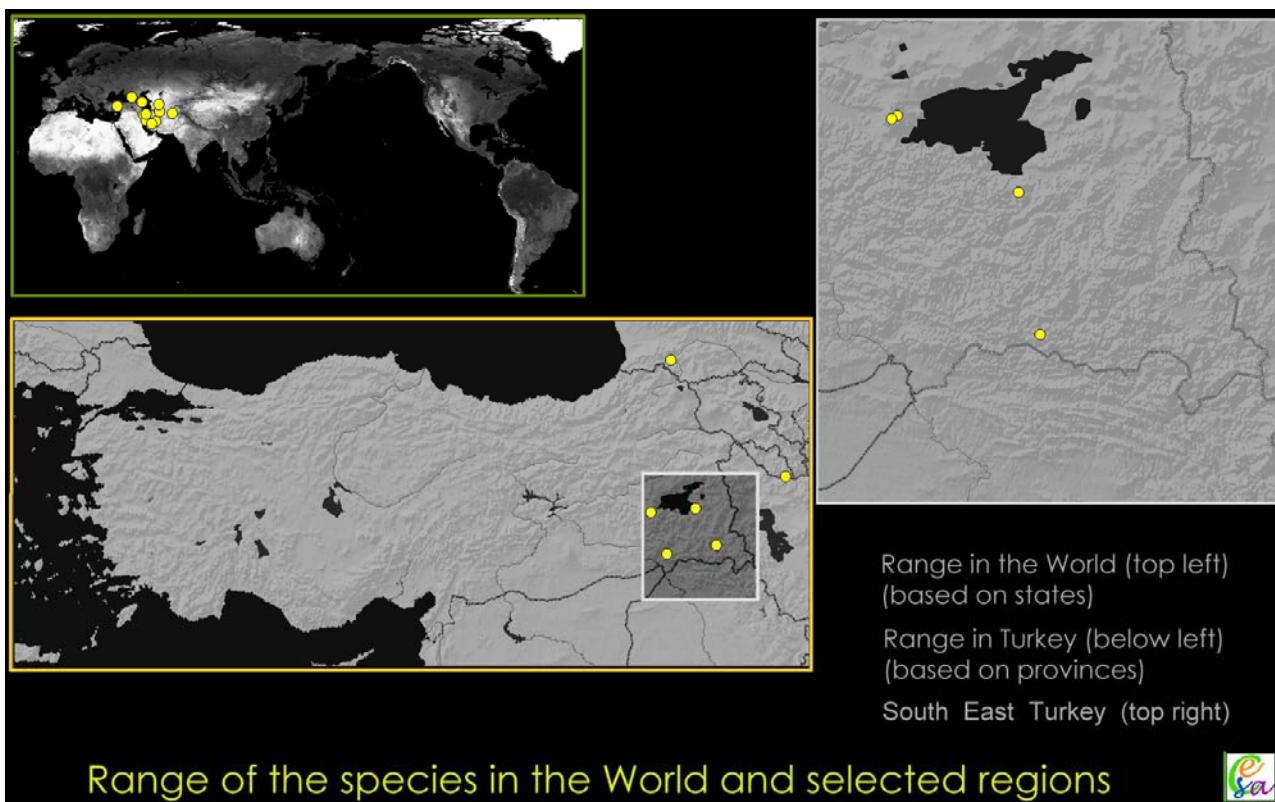
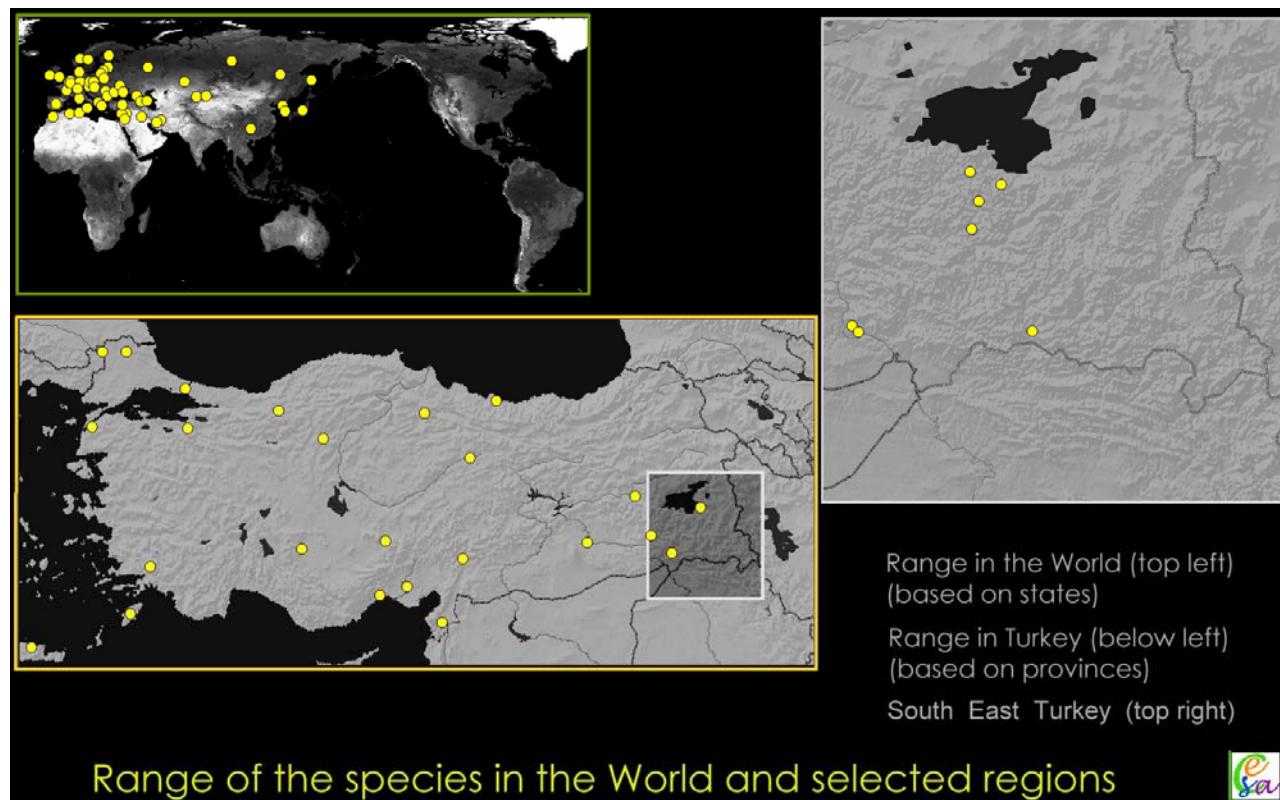
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